#29

THE SAILORMAN

DEC 1981

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Advertising Rates

Quarter page	£15
Half page	£30
Whole page	£50
Back page	£55

Published twice yearly in June and December

Copy 1st of October, 1st of April

SMALL ADS FREE TO PCA MEMBERS

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Cover Photo The new "TIKIA", car-top fourteen-footer from James Wharram Designs.

THE SAILORMAN

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Published by:
THE POLYNESIAN CATAMARAN ASSOCIATION

Printed by: DEREK SMITH PRINTERS
High Street, Brompton, Gillingham, Kent

A word in your ear

The response to my plea for more articles from members has been more than adequate and I now have enough for the next issue and a bit left over for the next Editor to kick-off with.

I am forced to relinquish the Editorship after this issue as I can no longer devote the time necessary to the job. I undertook to produce four issues and this I have done.

A new Editor is now urgently required — If you feel that you would like to take over the job (no previous journalistic experience is needed) please let me know soonest. You do not need to live centrally (I have never been able to actually visit the printers) and now that members are writing in with enthusiasm your task will be quite easy.

Whatever happens I cannot continue after December's issue so please if you are in any way tempted to try .... Otherwise there will be NO EDITOR for 1982!

I have had several enquiries about information on local waters — a series of articles by members from various parts of the country concerning sailing conditions in their area would be most welcome; even if they only point out useful approaches, anchorages and pubs.

Jim's column is very interesting this time as it shows clearly the direction in which sailing in the '80's is moving. The idea of the small, easily transported, camping and "trekking" multihull is without any doubt the solution for would-be sailors with limited means and time, in a period of recession and reactionary government.

I am bidding a temporary farewell to multi-hull sailing for a few months as I have swapped my Tane for a Ballerina monohull (only because I was unable to find a buyer and I hope therefore to be able to sell the new boat fairly easily and at the right price before the 1982 season). I still have a Swift catamaran that I sail in the Summer months, when on holiday so I am not yet entirely without a multi. In any case I hope to get another cat by next season, though it will have to have more accommodation than had "Tai-Lua".

Any-one like to buy a 21ft 6" Ballerina, with trailer, outboard etc. A very pretty and seaworthy bilge-keeler designed by Robert Tucker built in marine ply and cutter rigged with tan sails — a snip at £2,500.

May Tree Cottage,
High Street,
Swinderby,
Lincoln LN6 9LW N.I.A.

WE STILL NEED YOUR CONTRIBUTIONS

Jim's Column

The editor of the 'Sailorman' has asked me for this issue to describe "our new advances" to go with his photographs of our tiny offices in Milford Haven.

Most British Polynesian Catamaran builders will have read the article in the September issue of 'Practical Boat Owner' and perhaps also the one in the 'Yacht & Boat Owner' of the same month, containing these heartwarming paragraphs:

> "As we get to know multihulls and what makes them safe or not, it brings us back round to understanding how good the Wharram concepts are. Symmetrical hulls with ample freeboard, flared buoyant ends, conservative low aspect rigs, accommodation down in the hulls, the high slatted bridgedeck joining the hulls which will let waves break through, and the flexibly connected crossbeams. All very good sound seamanlike sense which few cruising multihull designers appear to have.
>
> "The more you think about the Wharram Cats, the more likely they are to make sense".

The article in the 'Practical Boat Owner' contained the following sentences:

> "There can be little doubt that Wharram catamarans have done for offshore multihull cruising what the Mirror did for dinghy sailing. and "they are highly popular amongst those with a desire to own a capable offshore yacht . . . . "

It can be seen from these articles that the Classic Designs and the PCA which set the standards for building and sailing have come a long way since the early days in 1965–75 when to be a Polynesian Catamaran owner/ builder was to be regarded as a "sailing oddball".

'We are now accepted and respectable!'

The essential idea behind the early designs was that I was designing for the ocean sailor, the man who dreams, plans and in so many cases already achieved his dream to sail across the oceans to new continents.

In the last two years, arising out of my personal life experience and many letters which I received, I have become aware that for every man who perhaps can sail over the horizon there are 10?, perhaps 100? who know that for various reasons they will never be able to achieve this, even if they have the same life dream.

Yet, they still want a boat to fulfill one part of themselves in building, to be able to sail at weekends, at bank holidays and during the annual holidays, so as to live an exciting, different life.

It is now my aim to provide these people with boats – catamarans of course. Though I do like most sailboats, I still believe that catamarans offer the 'mostest' in sailing ability for the least in materials, construction time and abilities.

These new Wharram designs are for coastal, estuary and inland lake exploration. They have, therefore, to be trailed behind a car or, in the smallest size, 'car-topped'.

We have solved the lightness problem by the use of epoxy resin. The best known method is the WEST system. I have had my eye on this material for 5 years. So far, it has withstood the test of time.

The launching of car trailer boats can be a problem. In the summer, on most launching ramps along the coast, there is a queue of boats. We are designing these boats to be launched off sandy beaches, so, they must have surf-boat profiles, a development of the Classic and PAHI designs. It makes them look quite distinctive.

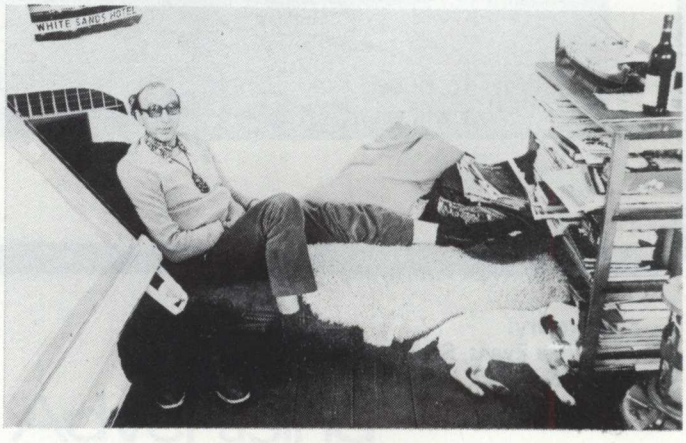
Cabin accommodation in small boats (furniture, table, seats etc.) is in my opinion a waste of time from the comfort, cost and construction angle. This year, Hanneke and I enjoyed a holiday trip with the smallest of this new range of 'Coastal Trek Designs', the 14 ft. HITIA. We had camping gear in the back of the car, the HITIA on the roof and sailed in Norway, Denmark, Germany and France during a 5 weeks 'Car Cruise' (doing 60 mph (or 100 km) down the European Highways.)

The proposed 17–18 ft. design will have camping accommodation on the platform, the 20–21 footer and the 26 footer (TIKI and TIKI ROA), bunk accommodation in the hulls as well as a pramhood style tent on the deck. The new decktents used on these designs are an integrated part of the design, NOT an addition.

There has been a large interest in these new concepts. They will attract many more people to the PCA. In Britain, with its foul and uncertain weather, we can organize better and more successful PCA meetings with these new designs. The Wivenhoe meeting in May was 'galed out' and so was the Milford Haven meeting in September.

The boat which did the most sailing in Milford Haven was the 14 ft. HITIA which zipped around Sandy Haven and was able to venture outside into Milford Haven when it was too rough and dangerous to sail the big boats in these confined waters.

Transport by road will enable people to gather at summer weekend meetings without having to sail for a week or so to get there. Indeed, I am looking forward to trailing my 26 ft. PAHI to Scandinavia next year to attend the first meeting of the newly formed Scandinavian branch of the PCA.



The owners of these new designs will need the help of the older (not in years), mature sailors of the PCA, for seamanship, care and watchfulness of the sea is just as essential with these new designs as with the old – in some cases more so.

Undoubtedly, owners of the new designs in learning to land through surf, camping in tiny coves, navigating with an ordnance survey map as well as a chart will develop a new, distinct sailing style.

Bob Evans, when reading this will say: "When will the plans be ready?" Unfortunately, there is only Hanneke and I at the moment for the designing, the building and the drawing up of these designs. We do get help from the odd design student, but not sufficient to move forward at the speed I want. Due to reasons, 'outside our control' we do not have enough money to take on full-time staff.

At the moment of writing, the 14 ft. car-top HITIA has been well tested and the design sheets fully drawn out. The PAHI 26 construction is well advanced, and the lines of the 17–18' and 20 footers are emerging in their final form.

Inspite of these new concepts, deep-sea designs are still being developed. A major project is a 55 ft. steel catamaran to be used as an ocean laboratory vessel by a former member of the 'Green Peace' team.

The articles published in the PBO and the 'Yacht & Boat Owner' set the seal of understanding and acceptance of 25 years of work. It is pleasurable to think that the whole new world of designs and sailing experience is opening up before us. The unpleasant side of it is: how will we be able to keep up with the new ideas without driving us in the centre into the ground?

Readers Write

Dear Editor,

Just received the Summer issue – I've been anxiously waiting its arrival. It's a very worthwhile publication for polycatters. From my perspective as a builder it gives much practical advice; and as a sailor I can learn from the experience of others.

Basically I'm a day sailing catamariner as I've had an alcort "Catfish" to sail for the past few years. I went to the "Sail-in" last year and experienced what a boat like Cariad II was like to sail. It was just great! I'm now building one myself. I've also met some swell folks: Polycatting is a great experience!

It is a real boon to see others' boats and to realise what their energies have produced. I should like to thank all you people across the pond for the fine work you're doing in putting together "The Sailorman". I know how much time and work you all must put into this publication. As one who finds six months an awfully long time, do you think that you could make the magazine a quarterly publication? **(NO – not unless you are prepared to pay four times your current membership sub. – Ed.)**

From: Stephen Veale, Fortescue, New Jersey.

Dear Editor,

Carol and I have just returned from a trip to Bermuda on VIREO. You may remember that six years ago we made the same trip on our Hinemoa TWO RABBITS, and were rewarded with a five-day gale in the Gulf Stream on the way down, and Hurricane Blanche on the way home. were rewarded with a five-day gale in the Gulf Stream on the way down, and Hurricane Blanche on the way home. We did not see the likes of either this time, but the passage from East Coast U.S. ports to Bermuda is generally a hard one. The Gulf Stream crossing, and the passing through several different weather systems makes for rough, unpredictable conditions. (Though probably no worse than English coastal sailors face every day). We were reefed over half the time, both ways, and coming home we made over 60 sail changes in 633 miles. The deck chairs could be used only at brief intervals, and there were few days when we felt like playing musical instruments or cooking elaborate meals.

But Bermuda was well worth the trip. The people are less reserved than they once were – shorter shorts, more cussing and shouting, etc., – but they are still helpful and friendly. Out of the sun, Bermuda is cooler than New Jersey in summer, and the vegetation is fully tropical. The coral and fish are as interesting as in the Antilles, though the water is not as clear. We had a great time. We anchored mostly at St. David's, and for a couple of days at Somerset Bridge. The island is so crowded with motor bikes that it's best to be at one end or the other.

We had no crew either way, which makes a small boat seem larger, as well as lighter and faster. Self-steering was essential, and we had good success with John Letcher's system for wind aft the beam: an elastic pulls the helm to lee, and the headsail sheet pulls it to weather. With wind forward of the beam, Letcher recommends that the mainsail sheet pull to weather, and this does not work well on VIREO, or on the boats of some of our friends.

In Bermuda we met Mark Hassell, author of LOVE FOR SAIL, and he claimed that a trimtab gear without differential linkage was giving him good results. Such a gear would not be difficult to build. One trouble with sheet-to-tiller gears is that they wander, which may not add much to the distance run, but does cause the sails to stop foiling, and the boat to slow. None-the-less, with Letcher's off-the-wind help and the techniques we have long used on VIREO for close-hauled and heavily reefed conditions, Carol and I hardly steered, except when changing sails or coming into port.

We lost two lower shrouds on this trip, because the loops around the mast were 2' circumference, and should have been 3'. The mast is hollow box section, 4" x 4½".

On the way home Carol said, "This trip prepares you for trans-ocean passages the way nothing prepares you for this." Bermuda is a real shake-down, but still recommended. We were 5¾ days going, 10 days there, and almost 9 days coming home. From here, no other destination offers such change and adventure in so short a time.

From: Thomas Firth Jones, August 11, '81
Marshallville Road, Tuckahoe, N.J. 08250.

Mike Britton is putting the finishing touches to his Narai Mk2 after seven years hard slog and hopes to be on the water by next spring. Peter Davey expects to complete his Mk3½ Tangaroa this year. He has packed his mast with silver foil to act as a radar reflector. Dave Bowler is living in a motor caravan while he saves up to build a 42' Pahi which he hopes to start on next year.
Spencer Martin is finishing his Mk4 Tangaroa at Blagdons and all being well will launch in 1982.
David Goss has brought Shanida round from Bristol to Exmouth and is full of praise for her handling. Having seen her three years ago I was interested in seeing how she had worn her trip round the Atlantic in the hands of her builder Simon Beeson. Simon was a (is a?) kamikase surf canoer and admits to having sailed Shanida very hard. However, Shanida shows no signs of undue wear and none of her joints seem to have moved at all. Well done J.W. and it's not often I say that!!!
My Mk4 Narai should be finished, but in pieces, by the end of August and then all I'll have to do is find the money to fit her out, so she should be on the water by 1985!!!

Marina Rope – 100m prestretched polyester 12mm £49 inc. vat ex del.
100m super nylon braidline 12mm £48 inc. vat ex del.
all other sizes and types available at similar sorts of prices.
from:– Guy Barron

Dear Editor,

I have recently acquired an Autohelm 1000 for my Tane Nui and whilst still awaiting information from Nautech about the fitting position, have made a bracket and have fixed the autohelm on the last beam in such a position that when the angled rudder stock is central the movement arm of the Autohelm is half in half out. On beating I find the autohelm works great, but on a reach, once 'Waimaru' starts to gather speed, the bow swings to starboard or port – usually the opposite direction to the wind and off course we go. Does anyone have any suggestions to experiences with Nautechs Autohelm on small Cats such as a Tane Nui?

Have recently returned from a short cruise along the coast of Algarve – Southern Portugal – from Sagres to the river Guadiana that divides Spain and Portugal – anyone passing this way is recommended to take time off from the passage Southwards and call into Vila Real de San Antonio (Portugal) there is a small harbour totally protected and then cross to Spain and anchor in another small harbour adjoining the border town of Aymonte (Spain) great for stocking up on sherry and other booze and then proceeding up the Guadiania to San Lucar – wonderfull scenery and takes you back to old Portugal and Spain. San Lucar is Spanish, supplies can be obtained and is about 17 miles from the mouth. Word of warning, watch the Bar into the river Guadiania, and approach from outside the leading Buoys– even if you do draw less than a metre. We approached in a S.W. force 8 at 10 knots, surfing . . . .

Further on the way South is Punta Umbria = Spain – a delightfull Holiday village along side the river that takes you up to Huelva – remember "the Man who never was" – he is buried in the cemetry in Huelva.
Yours, Barry Sadler.

Quinta dos Seleiros, Herdade do Funchal, Quatro Estradas 8600 Lagos, Algarve, Portugal.

Dear Editor,

It looks like your trees of promises are producing some flowers at last! I am enclosing a very poor flower of my own, grown – unfortunately – not in the Wharram garden. Had I known more about the P.C.A. in the very early days, I would have definitely chosen a HINA. As it turned out, I started to build an ATTUNGA, an Australian design, the size bieng similar to HINA, 20' x 10', demountable, with a solid plywood deck, hulls with a deep V forward and almost flat at the sterns. No, not as seaworthy as a HINA. I got stuck with that boat – and although I bought a set of TANE plans, I never started building: House and family were first, lately the high prices and so it is still the ATTUNGA – but I still do not lose hope . . .

I am enclosing a rough sketch-map of the area involved, so if you find the "flower" interesting enough to be planted in your forest of promises, let me know, I will send you a map of the area, which might be more suitable for printing.

But the experiences described, could apply to any polycat sailor as well. The lesson from that trip could be put in those few words: Plan your cruise to the last detail! But then – I would not be able to write an article like that!

Hope you enjoy it!

Keep watering the flowers in your garden, it always brings results. Good luck with your hard job and looking forward to the next "SAILORMAN".

With best wishes and greetings from

Gus Wisoky **(See next issue – Ed.)**
c/- GPO Hobart, Tasmania 7000, Australia.

Dear Editor,

Sorry about the delay in replying to your letter, but I have been turning Inverness upside-down in an attempt to find someone who will turn ½ frame colour slides into 5 x 4 black and white prints, sadly to no avail. The only firm who would even consider doing the job were not only frighteningly expensive but also candidly expressed the opinion that the end result would not justify the bother. So, sorry, no photos.

Regarding the junk rig, J.W's problems seemed to be that at over 8 knots to windward in Tehini, the sail stalled out, due to its odd aerodynamics. However, since my Tangaroa doesn't reach that sort of speed to windward, I don't think the problem will arise. Whilst at the I.M.M. in Norway, I met Jannick Cortsen, a Dane, who wrote about his junk-rigged Tangaroa in the July 1971 "Sailorman". We talked a lot about the rig and he said he would not consider any other rig on a cruising boat.

Regarding the new car-top cat, everyone who saw it commented on how nice it looked (it really was most eye-catching) and as far as I could see it seemed to sail very well. In the "family race" it beat an awful lot of other boats, admittedly in light airs. It simply looked a lot of fun!

Regards, Tony Perridge

Rhuallan, Drumchardine, Kirkhill, Inverness.

Dear Editor,

I am writing on behalf of my husband, who is at present working overseas and hopes to be back within the next few weeks to resume work on the Tehini we are building.

We have one hull almost completed, and the second hull with the galley to finish. My husband suggests I write to you asking if you would kindly put a notice in the "Sailorman" enquiring if anyone wants to do a spot of work in exchange for sailing at a later date, or for weekend sailing at Bala in Wales. This would be much appreciated.

Yours sincerely, Claire Marsh.

Flat 1, Lloyds Bank, Baker St., Fenton, 5OT, Staffs.

Extracts from a letter by Mark Johnson of South Carolina, U.S.A.

"I used to go out of the little river inlet (on the North Carolina/South Carolina Border) every day. This inlet is **treacherous** at times, but I could even drive my little "HINEMOA" through 7' foaming breakers. During an unusual low tide one time, I touched bottom half way out of the inlet, tried to come about and broached on one of these large breakers, went about 100' sideways, and she **still** came down on her feet.

"Many times, I was caught in waves that were higher that the 24' mast, as I would intentionally go out in these conditions for experience."

"Later, in Key West, I would be the only boat out 'for fun' in 40 knts. winds and I even rode out hurricane 'Frederie' (60 knt. winds) at anchor. What an exciting night that was!"

Extract from a letter by Tim Ainley, Canada.

"I don't know if you have heard yet, but we were surfing John Bellanger's 45' **ORO** "PYXIS" in the gulf of the St. Lawrence last September. It was at once the most exciting and frightening experience I have ever had. The coast guard announced 50 knots of wind, and with the outgoing force 9 and an incoming tide, the Gaspe passage produced some very steep waves with large breaking crests. We guessed that the larger ones would have been about 30 ft."

"Pyxis" – heavily laden – would often bury her bows right up to the 'nostrils' in the bulwarks as she went racing into the back of the wave in front of us after what seemed like minutes of surfing on each wave. It was a front somersault that I feared most but "PYXIS" always lifted her bows in time.

"As night fell, after 36 hours of this, we had travelled over 200 miles and were exhausted; never having been able to sleep for the excitement. The waves were getting steeper all the time and finally, in desperation, with flashlights, we found all the components for and assembled a Jim Brown drogue with 300 ft. of nylon and a bridle to the two stern samson posts. As we threw it over the stern we held our breath while the rope went streaming off the trampoline – over the stern went the bridle, and then, as if God had tied us on to a lifeline, we were elastically slowed and our two sterns drawn firmly over the crest of the next wave that threatened to pick us up and send us hurtelling down its face. What a relief!

"Pete and I immediately went below and were able to fall easily into a relaxed sleep as the motion of the boat had quite changed, and there was no more fear of the water hissing by our ears in those frightening bursts of what I imagine must have been close to 20 knots. And all this under bare poles! "

"Well, I doubt if any of this is new to you, but let me take this opportunity to thank you for having designed such an extraordinary forgiving vessel. I have crossed the Bay of Biscay on an OCEAN '71 and the Bermuda Triangle on a Samson Marine ferro-cement ketch, and both of them were trouble to handle in less severe conditions that "PYXIS" in the Gulf."

FOR SALE

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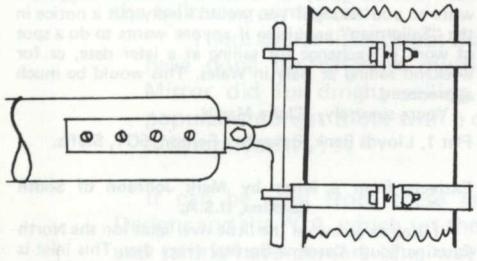
SLEEPS FIVE.

TEN SAILS. *£7,000*

EMSWORTH 3440 WEEKENDS

Dear Editor,

While hoisting and lowering the mainsails on a couple of Polycats I have noticed that the gooseneck often sticks and the boom then needs a great amount of muscle to move it; or the halyard needs slacking off to release it. Conor O'Brien in his book "Deep Water Yacht Rig" turns the standard Wharram design around so that instead of a short tube sliding on a long rod, a long rod slides in two spigots on the mast bands. As the long rod cannot 'fall over', as the short tube can, then the sticking problem should be overcome.



Another point made in this book written in 1948 would reduce the number of blocks at the masthead and halyards rubbing and frapping against the mast. To do this you attach the topping lift to the top of the mast leading it through a block on the end of the boom and tie off the rope to a cleat anywhere along the boom you fancy. The advantages of this system are a shorter rope and all moving parts at deck level.

Hope this may be of use,

Yours, Guy Barron.

Court Barton, Newton St. Cyres, Exeter, Devon EX5 5BU

Dear Editor,

Last year I wrote you a letter dated 18 November 1980, so I am early this year. Recently I talked to Helmut Wams the Dutch area secretary living near by, and discussed the final date for news for the next "Sailorman".

As far as I know there is an article in stock by my son-in-law and daughter Marijke about their experiences with a water-generator and the Sharp self-steering. This is not placed so far, so we don't need to feel too much worried about giving not many news items for the next number.

From one of the owners we received a week ago an article on his experiences with his Raka. (Fred Potman). He agreed the text being translated for the Sailorman, as it can be of use for others.

It will be placed in next number of the CTC news too. That will be number 75, (Nov. '81) number 74 is just brought to post-office, there is a period between two numbers to be compared with a period of light winds between gales, time to do other things, amongst them to write this letter.

You do very well to fill the "Sailorman" with good photo pictures. One picture most of the times gives better information than a thousand words, as the Chinese say. (Did they really say it ? nobody controls such remarks !)

This year there was quite a flotilla of Wharram boats in Norway at the International meeting at Stavern. You will certainly have heard about it. Tortuga went there via the West Coast Hardanger fjord, to the South and up in the direction of Oslo half way.

Other boats present were a Tangaroa from Scotland Faioleag (Tony Perridge), another Tangaroa from Tore Tunheim, various: Hina, Hinemoa, another Narai, Tane from Billy Wright (Kopenhagen), HITIA from J. W. Designs. In fact more than 70 boats of various types were present.

As you know I own a small Havkat now, 18 feet by 11 feet, cabin cruiser. Fast and very useful on protected waters, though quite good in rough weather too. But I myself am not very good in rough weather. Very dry sailing on that boat and a real two persons cabin with bunk 7 x nearly 5 feet.

I hope you can use the translation of the article by Fred. I don't know if Helmut sends you news too.

Best wishes and success with next Sailorman. This is a very special magazine, not to be compared with any other in this field.

From: N. D. Boon.

Groningerweg 46, 9738 AB Groningen

(See next issue – Ed.)

S. W. NEWS

Dear Editor,

This newsletter is being typed by myself with two fingers instead of by the 'seat cover' (girlfriend to you non C.B. fans) with ten. No, boatbuilding hasn't broken up another romance it's just that the letter won't get written if I don't do it here and now! So please forgive typing errors and spelling mistakes.

May I thank all those who wrote in response to the last letter. I was surprised to find a couple of members who own boats which aren't polycats. David Milner has a 26' Lock-Crowther trimaran which he said he bought instead of a Wharram because it was offered at a price he couldn't possibly refuse. Personally I think it had more to do with the fact that it's very light and has more sail area than a Narai and is fitted with a speedometer from a Ferrari. At the other end of thesscale Norman Petty has a Heavenly Twins for family comfort in a small boat. Weymouth harbour is his home port and he has sent me an article on anchoring in this area with the suggestion (!) that others may like to contribute similar pieces on their home ports with particular reference to facilities for cats . . . . . how about it, you can always practice here before writing that article for P.B.O. you always promised yourself you would.

"In an age when mass society has rendered obsolete the qualities of individual courage and independent thought the oceans of the world still remain, vast and uncluttered, beautiful but unforgiving, awaiting those who will not submit. Their voyagesare not an escape but fulfillment".

So reads the introduction to the Slocum Society which is, and I quote again "a non profit making organisation encouraging long distance voyages on small yachts and keeping records of such passages. The society is a repository of information on long distance small boat passages. Enquiries on this subject are researched from its extensive library and archives. Members may also call on the society for advice in planning cruises. Membership is open to all."

Dues are £5 per annum for which you get a copy of "The Spray" twice a year. Details from Michael Hardcastle-Hina – address in the membership list.

The truth can now be told about those masts from the forestry commission. The real cost for two sticks for a Narai, 40' and 30', squared off to JW's sizes, delivered and with about 400' of 6 x 1 planking was £175 plus all the organisation. In retrospect we took a great risk in buying logs large and long enough to get square masts out of before arranging delivery from the sawmill back to our homes. If we had had to have them delivered by hauliers the cost may well have been another £200 split three ways. By good luck Ralph Bradshaw in Southampton managed to hire a non h.g.v. lorry with an extra long bed which meant the over hand was just legal.

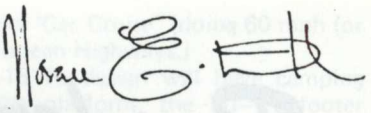
By the time he had loaded the timber at Honiton and delivered to Plymouth and Exeter he had decided that for the trip back to Southampton with his Tangaroa masts he would have all the overhang sticking out of the front where he could see it. He left Exeter with his mast waving about in front of him (9') like an elephant in season which I didn't think was too sensible at 11 o'clock at night. However, he made it home without spearing anybody or having his projection snapped off. The Tangaroa masts, with an appropriately smaller amount of off-cuts, cost £130. **G. B.**

CAMEO

Foam slides past
the hissing bow
and a whispering wind,
captured by gently-bellied sail,
carries them over the sea.

The silver notes of a flute
fill the air and are gone
like raindrops on water.
Cotton-wool clouds jumble the sky
in non-geometric confusion
above a jagged skyline.

A beautiful woman,
hair blowing in the wind,
eases the tiller.
Her beared companion
sits on the bows
contemplating the scene
wondering if the dolphins will come.



(Poem by Horace Dobbs)

A memory after sailing with Wade and Jan Doak aboard their Wharram Catamaran "Interlock" off New Zealand in June 1981.

Star Letter

Dear Polynesian catamaran sailing buddies,

Just a few words about the building of my 35ft. extended Hinemoa, which I hope to have launched by the time you read this!

First of all, I am an experienced sailorman, as I have done three voyages from the Hamble River to another part of the Hamble River in three different Mirror dinghies (or it might have been the same one) and once saw a Drascombe Longboat. In my considered opinion (and Jim Wharram told me that he agrees), Polycats are basically good boats. But I decided that before they would tack or go to windward they are in need of some sort of modifications also I am not too sure, about running and reaching. On other points of sailing they may well be unsurpassed !

First leeway! I am sure that when I get to sail a Wharram (did I mention that I once saw a trimaran?) it will make far too much leeway. Therefore I did a few simple calculations designed to assess the static loadings on a Contessa 32 making twelve knots sideways on a falling tide, doubled it (as nearly all Polycats have two hulls), knocked a bit off the bottom (N.B. not all Wharrams have ballast keels although after reading the last few editions of the "Sailorman" most technologically turned-on Polycrats have fitted them, along with a back-up centreplate and lee-board system) and drew a retrousse stern on the plans for my modified eight-berth Maui. These are as follows:–

$$\text{Length(L)} = \frac{\text{Area (A)}}{\text{Width (£)}}$$

Therefore:

$$x = 3/\overline{A£L}$$

Divide by 2 (divide by two)

$$\frac{x}{3/\overline{A£L}} = L.$$

Which proves my point rather nicely, I think.

This is of course for static loading. Anyone who can work out the dynamic loading is a better man than I am.

With these conclusions in mind, I decided to fit a black anodised aluminium toe-rail, which I am by co-incidence producing as a cottage industry at the very low (I think) price of £235.50 inc. VAT & p&p, in my little factory in Lymington.

As I have said, by the time you read this letter, I hope to have begun construction of my 19ft. fin-keeled single-hulled Ariki, which I hope will be the first multihull to legally enter the Fastnet Race. Also, could you tell me the exact frequency of light that should be emitted by yellow wellies?

Yours sincerely, Buddy B. Walker

P.S. I am offering my 12ft. Ford Cort – Hina for sale for £3500 so that I can buy a boat or a bigger car. Anyone interested?

I do not know who this joker is – he may not even be a member – Buddy Boy Walker is not on our current list – however, despite the ponderous nature of his attempt to take the piss, there is a certain amount of truth in the idea that some PCA members seem unable to resist altering and modifying the standard plans when building their boats. In any case this is the only attempt at humour that anyone has sent in this time . . . . (Ed.)

Pyxis cruises to the Eastern Seaboard

by John Bellenger

As Diane and I returned from last minute shopping our Oro tugged lightly at its anchor warp, its hull glistening in the late afternoon sun. The Avon was in constant ferry service and Pyxis was covered with people! Grog passed freely from bottle to lip. Well wishes were given, joy expressed, and backs were slapped. The decks of an Oro are large but our gear and groceries covered every square inch of it! Things were "fire bucketed" down to Diane who endlessly stacked and packed food under seats, bunks, and upon shelves.

Willing hands poked stuff into every hatch and space till things protruded even from the mast cases. Some of these things remained "hidden" a month later. Because the storage possibilities are so endless, a manifesto is an absolute must. Stored items are uncountably many, ranging through asprin, sail needles, spare bulbs, engine parts, pencils, tools, charts, treats, oil, fuel, books, personal effects, wet weather gear, strobe safety lights, cameras, new rope, binoculars, postage stamps, Primus nipples, whistles, foghorn and a "time bomb" . . . resting dangerously up behind the W/C. This was not to be opened 'till after the last (7th) lock, given as a surprise package by our dearest friends Dave and Neila.

Our "Mergul" (combination Seagull and 20 h.p. Mercury) thundered into life and we swung purposefully through the moored fleet of multihulls. As we passed the headland and saw our friends waving we fired several flares up into the gathering darkness.

September is late in the year to be heading for the fiftieth parallel. Our course now slanted to the east in a light breeze . . . The motor was silenced. Water rippling sounds. No one was tired, no one wanted to sleep; we were all "high" and lay about the deck chatting and thinking. Yawns came to all at about 1.30 a.m. . . . so . . . who would stand the first watch? Some unlucky sleepy person, that's who! The rest of us slept deeply in comfort whilst the helmsman fought bravely to keep awake. At some ungodly hour we were awakened . . . tired, cold, and unwilling. What terrible luxuries boats are!

Once a person has struggled to keep awake through a watch, that person learns to get all the sleep possible (except for owners). Pyxis needed dozens of small jobs doing, and like a fool I fell into the trap: thinking that one could navigate, stand watches and finish preparing a boat while under way! For your enjoyment, safety, and peace of mind; please believe that it cannot be done. The boat must be ready and completely ready.

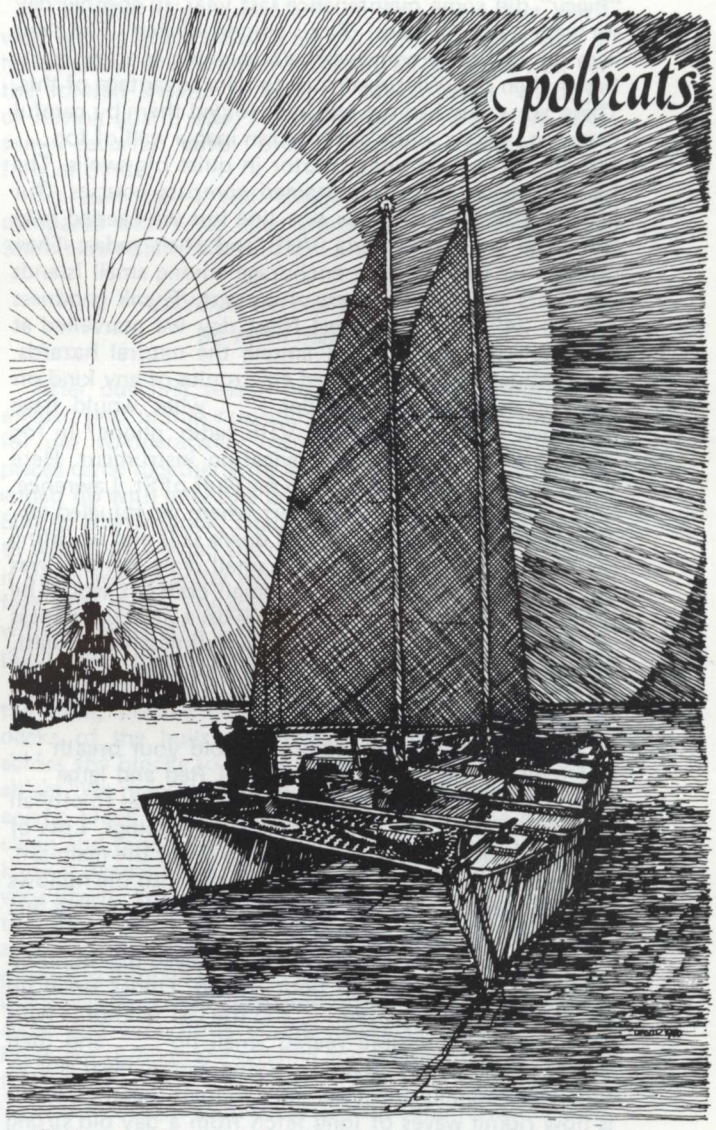
Lake Ontario, which we were sailing on, is about a hundred miles to its end where it flows into the mighty St. Lawrence river and Seaway. These latitudes are a mixing zone for warm and cold air masses, thus it is one weather system after another. Continual changes are the norm. The sea is about a thousand miles to the east.

Constant and diligent attention to navigation is a minute by minute thing; indeed we had, and needed, around sixty charts on board for this trip. Yet perhaps an ocean could be crossed with only one!?

At a great speed on a perfect sunny afternoon we came broad-reaching past undulating farmers' fields and islands . . . as if in a dream . . . into more narrow waters – to Kingston. A strong tail wind made it seem wise to furl sails and to lower the motor. "Propulsion units", a never ending love/hate affair. At the critical moment, just when most needed our wonderful little iron horse threw up it s heels, gave a couple of farts and fell into an urgent silence . . . This sudden silence now caused more shock and amazement than the loudest clap of thunder! Right in the ferry lane! Drifting down onto a low bridge! Strong wind!

A frantic pull or two convinced us that it was time to devote our attention to things other than motors . . . Saved! By the anchor. What great things are anchors! More reliable than motors and more useful. Perhaps the best insurance policy that a boat can have? At night it was cold. A silver church steeple pierced the sky. The water was moving reflections and Pyxis tugged gently at her anchor . . . Sheltered from the strong but now dying westerly roaring in the tree leaves and darkness above. Life was very serene.

Slowly drifting past countless small islands, we lay in the sun nibbling bunches of grapes; what a life! Motor-sailing into stronger currents we saw the first lock. Huge and a bit frightening . . . but once through one it seems fun. These locks take forty thousand ton vessels so have no trouble with polycats. Boats are lowered forty feet in each of the seven locks till at the end you are as if at the bottom of a huge well looking up the dripping sides to the sky and faces at the edge. At Montreal we saw fellow polycatters and their beautiful Wharrams . . . a Pahi, Raka, Tangaroa and Hina. Very enjoyable to be among the warm and generous French community. Our family of four polycatters who had crewed for us now had to leave to prepare their Tangaroa Mk.IV . . . "Cariad 11" for their journey south. Another couple joined us. Waiting. Drizzling rain. Head wind. Coldness. So we lay at the jetty. Showers. Wood stove burning. Coziness.



Patience exhausted, we motored out onto the swiftly flowing river, which is here wide and fast. After having spoken badly about our motor, we must now say how well it ran for ten hours at a time (non-stop) and at high revs., never missing a beat! We grew to trust and to actually love it. Excellent anchorages were located at the end of each day. This pattern held . . . always the sails up, but the motor was running. The current and the motor

carrying us down to the sea.

Another crew change at a small town along the way . . . a polycatter extraordinaire. . . and Raka builder. At last it was windy and from astern! We fairly zoomed along. All night the wind held true and we broad-reached very fast . . . and this on top of currents at times as high as eight knots. Only three of us now and on deck the whole time. It gets busy when you travel at such speed at night and its all strange and new and the traffic lanes are narrow and shared with huge freighters.

Steering for the distant green lights, spotting their numbers and marking them off on the chart (or you'd never have a clue where you were!) Under a few stars and a half moon with a cool wind, we raced on, far now from our local waters. Wending our way past wooded hills and cliffs passing lights at the sides. The ninety miles to Quebec City was done in not many hours but within sight of this historical old city . . . the wind faded and a thirteen foot tide flooded against us. The very first tidal waters for Pyxis! To reach an anchorage and sleep.. . . we motored into the foul current, our oil navigation lamps have never been blown out yet. We carry strobes at each mast head which we often flick on when a large vessel is approaching. Another crew change. Polycats have this advantage . . . there is always someone building and needing experience!

Soon out of Quebec city we passed the island where "Piggy" did some maintenance last year. In another day we were among whales! (Pyxis among whales!) The tides here are like huge conveyer belts running at a few knots first in then out. We timed runs to take advantage of this. There are a few bad rips but we avoided them by careful planning. After a sunny start we ran into a wall of fog . . . and all day we ran under motor in quite big swells. The fog was dense so we maintained compass courses. Our little Seafix RDF gave us one line but we needed help from the coast guard via VHF and their radar. They ushered us into a tricky anchorage among small islands and reefs and in a fast race of current. Thank goodness for the 24" radar reflector! Next day we marvelled at how well we were placed among the natural hazards. Even though I have never liked electronics of any kind on boats . . . I have to wonder . . . what would have happened without that little VHF radio 'phone? In fog it is a very real legitimate navigation instrument. Here the river widens out rapidly into the Gulf of St. Lawrence. Lost more crew at a fishing port where we refueled etc. The wind was flapping out tied down sails and whistling a steady tune in our rigging. A small craft warning was out. Surely an "Oro" is not a small craft? It would be behind us and we needed miles. So with a little uneasiness we sailed, speeding off toward the darkness in the east. Exhilaration is to be out on a big catamaran with a tail wind. You can feel the power as the stern lifts and then the surge of speed!

Get ready for it, get ready . . . hold your breath . . . and look to the east . . . full moon! Red and large . . . what a life. At moments such as these one has to pity all the people who will never know these feelings. Lots of motion as well as speed caused us to lower the main-sail. As Pyxis rose over the swells and dipped into the hollows here we were . . . eating dinner out on deck moving fast toward the rising moon ahead!

Great mileage was made and we achieved one hundred and ninety miles that 24 hour period. Under small jib and double reefed mizzen . . . and the last ten hours with no mizzen and double reefed small jib . . . and then finally under poles! Dawn . . . flying. Sunny clear sky. A time when details and time seem to melt together. Pyxis is now riding waves of long fetch from a day old strong gale. A slight tilt. A hesitation. And then you start to feel the acceleration! We surfed and surfed. The water was hissing by and a fine spray off our bows on each side was as high as our six foot bows! What ecstasy, what terror, what dry mouths! A long afternoon of this sunny surf washing itself. Cold . . . Getting weary. Even in the galley the power and speed was audible as the sink drain sucked up racing water and gurgled it out. The cabin sole rose and fell a ponderous twenty feet or more, throughout this never ending afternoon. Going to the "head" up in the bow will not be described except to say this it is possible . . . given enough determination! At dusk the waves were bigger, steeper and closer together. Already under bare poles and yet still surfing down about every second wave at frightening speeds.

All of us were fatigued out . . . another rough night was about upon us and somewhere up ahead, we knew not where . . . was land! Anticosti Island. We didn't know how far away it was but surfing with fifty knots of air pressure behind you, is not good. The time had come for a tire to be dragged. The tire could not bite in but skipped along on a bed of foam. A special tire drogue (invented in California) was now coupled up and dropped astern. We knew in seconds that this was it. Instantly this device stabilised our mad rush to destiny! It slowed us dramatically and worked extremely well. See how its line cuts down into the approaching wave whilst it was in a wave behind.

Feeling safe now, the crew slept. Pyxis was doing her thing perfectly and didn't really need anyone to watch over her, but I couldn't resist sitting alone seeing another moon rise . . . into a clear sky again. A world of racing silver mountains. Occassionally I peered ahead for land. Pyxis made me proud of her this day and paid back all the effort of her construction. She was alive . . . she breathed and moved. "God I'm glad that I built you Pyxis!" . . . I thought as I touched the gently swaying tiller. "I love you.".

Next day when I woke up old Pyxis was romping along under full working sails. Moderate breeze, Pyxis self steering all day. Odd jobs done. Good wakes swishing astern. Things hanging to dry. Hatches open to air out the boat. Walking about on deck. Cleaning navigation lamps and refueling them. Being uncertain of our position. Darkness. A moon in soft cloud. Fair swell. Full sail . . . the breeze falls light. The compass light is on and bright red. I sit under a rug, feet in the stern hatch. The crew sleep. The helm sways gently to and fro as it self steers through the night.

Dawn. Down to a warm bunk. Sweet oblivion. Ten a.m. next day we are ploughing into fresh winds and crashing into waves. A cold grey day with scuds of rain, gusts of wind and reefed main. We hammer on, closing on the Magdalen Islands. Diane was first to sight them through the mist. Glad to see them too! As the forecast was for three gales over the next few days . . . within a half mile of the line of entry buoys we dropped the main sail, fired up the motor and went in very fast along the buoys, all busy preparing anchors, lines, glancing at charts etc.

Coming through the narrow opening, we were in calm waters, but such power was in the wind that our 45 lb. CQR couldn't hold us (because of the rocky bottom). We were almost blown onto a very rough sea wall, only the mizzen saved us for the motor could not force the bow into the wind but the mizzen soon blew the stern around (God bless it!).

We ran at speed onto the lovely little sandy beach and threw out our anchor upon dry sand where it held. We then paid out line and hung there secure but in case of a wind change we paid out a few hundred feet then dropped our 60 lb. danforth and pulled back between the two. Sure enough the wind did change and blew hard. How lucky that we had been ready. It is cosy in a catamaran on a cold windy night hearing rain showering down on the decks, drinking mugs of soup and swigging nelson's blood from the bottle. Wood fire burning, excited talking, then we grew silent and thoughtful, emptied our coffee cups, went up for a pee and a look about. It was cold and wet and windy. We were secure and safe.

How can words describe the feeling of well being as you lie there warm and dry among hostile elements in the boat you built. It is a whole world. We are now a thousand miles from home. It is too good to be true. A deep good breath, blow out the lamp, listen to the boat, well earned sleep.

The Boatyard

THE BUILDING AND COMPLETION OF A TANE NUI IN PORTUGAL By B. Sadler

Looking at the membership list of Portugal it seems that only two of us are members, what a pity when for certain the waters of Algorve offer such perfect near all year round Sailing. Only last Sunday – 11th Jan, with winds on the scale of Force 5, beating across Lagos Bay at 6–9 knots in a flattish sea – in bright sunshine.

Work was started on the 12th January a year ago – when after a lot of hassle, because the law in Portugal demands three complete sets of plans before giving permission to build, and I'm sure that Ruth Wharrem thought I was setting up in opposition! and many more problems we finally obtained the necessary Marine ply and other materials and work begain in earnest. Sadly I personally have neither the ability or the time to do the building so I 'did a deal' with Alan and Kathy Richardson, recently arrived from UK, in their 'Illa Manu' and soon they had the shape of the hulls, painted all the stringers, cabin furniture built, and the ply was on.

I decided that it was worth spending the extra on materials and the workmanship being put into the building was worth the extra costs, so hence we have:- Mahogany Ply., pine standard stingers, teakdecks, Borden Sheathing totally over the hulls, Sparlite mast, 4 and 5 mm stainless steel rigging, All S.S. hardware, made locally from 3 mm sheet S.S. welded together to give extra + strength where needed – i.e. rudders. The rudder pintle came from a wreck off sagres!! All International paints, Gripfast nails and brass screws. etc

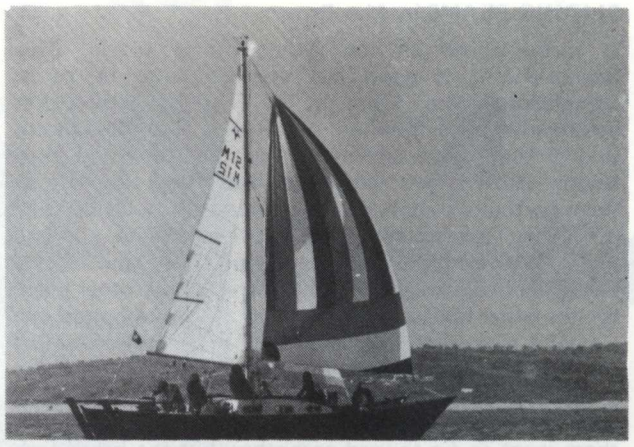
All this adds up to a sizeable investment, but the sheer joy of (a) admiring looks from the local fisherman, and the (b) having a fast, quality craft in Algarve without the need to 'leave the Country' every year, makes it all very worth while.

During 1980 George Payne and his wife and Ruth Wharram passed through Lagos in Raka and I suppose this was the start of the idea. I also copied the 'Bowsprit' off Raka that works very well.

For power I use Jeckells Sails, with a light drifter and a recently acquired 'Lazybones' with Portuguese Red and Green Colours. The only problem being that Jeckells like to the put the 'eyes' of the Insignia above the eyebrows, that looks a bit silly!! May be this I can have changed one day!

My Touhatsu 9.8. on a swinging bracket, and mounted on a piece of ply aft gives all the power I require for in and out of harbour., the only problem being in certain wave conditions the bow waves cause severe 'banging' on this bracket, and we are looking for ways of making the bracket more streamlined and putting a bow onto the bracket. The bracket is supported with two S.S. rods that attach to the last but one beam.

I am contemplating fitting a Solapac Battery Charger



as in the Summer a fridge would be nice I am sure.

Handling, with large seas, windward performance as we all know is not good, but swings and roundabouts take their part, and the windward performance is very much offset by the beam reach., and down wind.

Am thinking of dropping a 'well' in the stern bunks to provide a 'recess' for the helmsman's sitting position, would welcome any suggestions from Wharram Organisation on this and from readers. In addition, any information on self-steering would be appreciated.

I installed Wykham–Martin furling gears that work well with a good tension on the foresails done with a handy billy, in addition two Gibbs 7STA work well for the foresail sheets. In spite of advice about 'windage' of having guard rails, I installed guard rails, that offer some security when one is carrying children as I frequently do.

To sum up – not cheap; but good value when compared with what I see offered in the Yachting press. She's blue–she's beautiful and She's MINE!!

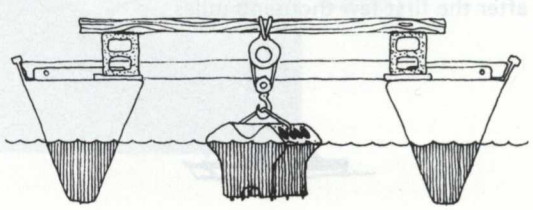
LAYING OUT A MOORING

by Aben Mackenzie

After our first season on a "borrowed" mooring, it seemed best to make up and install a new heavy mooring for our co-operatively owned Hina "Cirrus". Bits and pieces came together with a minimum of expense and we ended up with only one problem – how to transport the 500 lb engine block, chain and float tire the four miles to where we wanted the mooring to be and how to place it in six feet of water which out in that bay is about 400 feet from shore. The solution turned out to be dead easy with the rental of a ½ ton chain block and the wonderful practicality of the Wharram cat taking care of the rest.

By removing the central decking section just aft of the mast, placing two concrete blocks on the inboard decks of the hulls, and placing a strong iroko plank across the blocks to fasten the chain block to, we were all set. We manoevered the boat astride the barely awash engine block, fastened the chain block to the mooring chain and raised the engine. With this arrangement on a Hina it seemed best to have the block awash and move very slowly. With a larger, higher boat it would be simple to raise it clear of the water. To drop the block we anchored, fastened a length of old cheap line around the plank and through a loop in the mooring chain. The chain block was then disengaged and once the float was cleared away and everything double checked, a stroke of the knife cut through the old line and the mooring sank very fast!

This technique requires very calm conditions.



SLIDING BEAMS by Mac Brown

A further note on the sliding beams article; (Dec Sailorman) it is good but not necessary to be so complicated. When I bought the Tane from Hal Glover he already had it mounted on a trailer with short beams two of them were sufficient. I launched with the short beams, laid the four beams on board and tied two of them to the two short beams (indicated by a broken line in fig 1). I placed the other two beams with one end lined up for fastening to each hull. (One end of one beam for one hull and the other end of the other beam for the other hull) as shown in fig 1. I then unbolted one end of a short beam from each hull so the hulls could be tipped as in fig 2 to bolt the one ends of the other two permanent beams in place. As you can see now the hulls cannot tip over because the wieght of the beams makes them want to tip toward eachother, but the beam ends resting on the outer hull prevent it. You can now untie the two short beams and unbolt them and bolt in one end of the other two beams. Shove the hulls apart until the free ends of the beams drop into place, bolt and you are done (fig 3). One person can do this because I did it alone.

Ted Reece has a well thought out system, but why carry around extra gear when you don't need it. There is enough stuff to trail with a Polycat in the form of all that decking–longer masts and booms and your regular beams without adding a couple more.

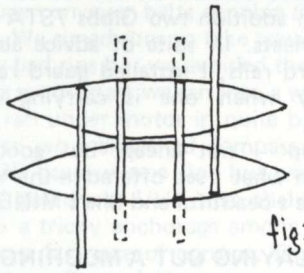


fig1

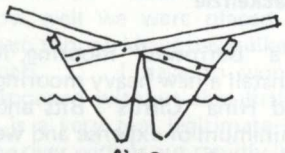


fig2

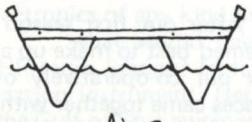


fig3

HANDY KETCH RIG

by John Bellenger

Our ketch rigged Oro is gentle on the helm and steers herself over a broad range of sailing. From dead astern we have to steer and even to anticipate the natural slewing which is similar to any boat. Oddly there is hardly ever any adjustment needed to the sails regardless of wind force or crew movement: i.e. we can all go out onto the bow nets or below decks, we never need to lash the tiller....it sways gently too and fro....alone.

Oh boy! How we love those two long keels... truly.... like a train on tracks! Twice the mizzen sail has enabled us to avert serious trouble. Once in a high wind under motor when there was not room enough for speed to build up to turn the boat up went the mizzen..... and around went the stern like a weather vane! Since learning about the mizzen we never miss a tack – which is good assurance when in a harbour because an Oro is quite a big boat. For us there is no way that we'd consider any other rig on this size boat. Great to sail, well balanced, easy to handle. Quick panic reef – just drop the main entirely, the craft is still in balance. This is the formula for a perfect cruising boat. This is how we feel after the first few thousand miles.

EXTRACT FROM BRITISH COLUMBIA MULTIHULL NEWSLETTER MONIACAL SAILING

Excepting a few enlightened polynesians, history has shown sailing to be the mileau of monohull enthusiasts. Columbus discovered America in a monohull; Chichester single-handed round the globe on a monohull. Yes, the monohull tradition is a proud one extending back over hundreds of years. In view of this rather impressive past, monohulls, like other regrettable historical curiosities, deserve our serious attention.

The concept of 'multihuller as cultist' is a popular one in the sailing world. Among cruisers, multis are generally tolerated with a type of paternal amusement – "Don't worry Martha, they'll grow out of it." In racing circles, multies are as popular as the bubonic plague.

"Bob, what are you doing this weekend?" Craig asked.

"Who wants to know?" I replied cautiously.

"Want to sail a monohull to Victoria?"

The Crown 23 is a cute boat. The interior is spacious for its length. The styling is plastic and fir with teak stain. The boat fits well with the amorphous mass of small monohulls that congest our waters. Craig and I stowed our gear nearly on the bunks, readied the sails, started the motor and cast off. In English Bay we hoisted the sails and sat back for a leisurely ride. Moments later a gust hit, the boat heeled sharply, the groceries slid off the bunk onto the floor, my gear slid off the bunk onto the groceries.

"Now we're moving," Craig said

"You mean capsizing," I added

We tacked and the boat pushed over to 30 degrees the other way.

"Now we're heeled over," Craig said. His gear slid off the bunk onto the eggs. Meanwhile, acting reflexly from my dinghy sailing days, I had hiked out in a futile attempt to bring the boat flat. Craig surveyed my curious position.

"You should have gone before we left," he said. During the six hours it took us to cross the strait the boat held a relatively constant 20°–30° list. This made life uncomfortable for all except those with a significant discrepancy in the length of their legs. The prospect of weeks at 30° on an extended ocean crossing sends shivers down my spine.

It was not all bad though. As for sailing characteristics the boat was well balanced, easy to handle and responsive. Unfortunately it was painfully slow. The amount of water that even a small monohull must push out of the way is prohibitive. In the words of a famous monohull and multihull designer, "Monohulls? Take the lead out and add two floats, thank you very much!"

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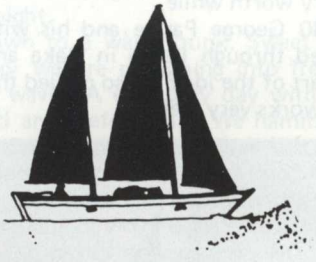


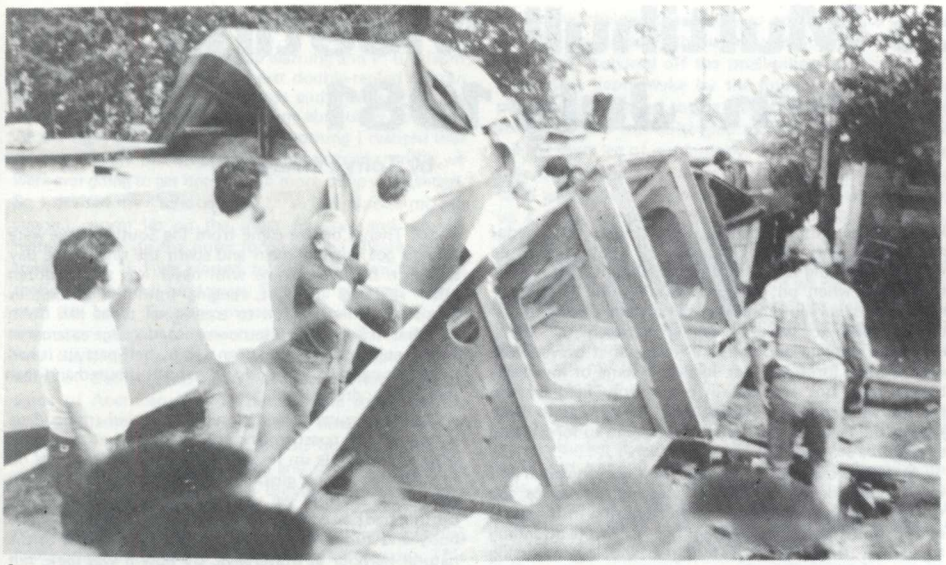
ROUGH WEATHER WARPS

By John Bellenger

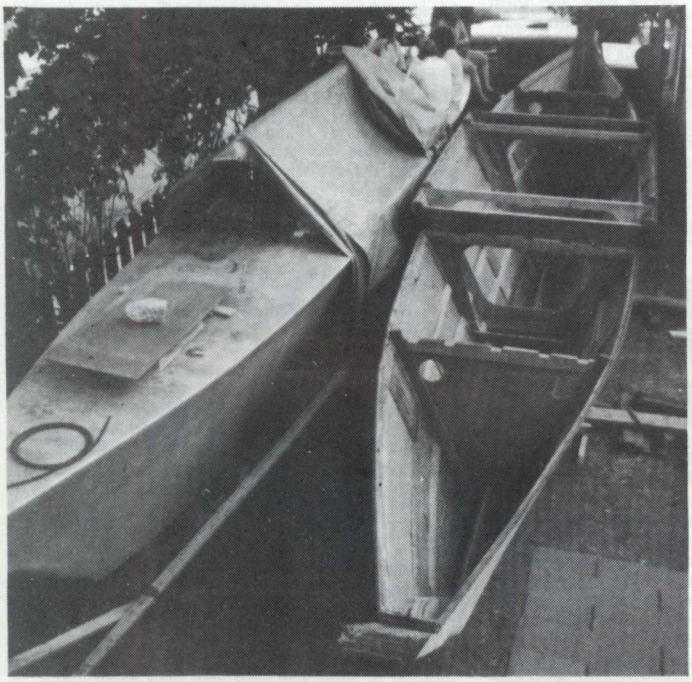
Time and some other things seem to get warped or changed when one is exposed to heavy weather. Little things - but things which one could never imagine. There is a tendancy for all (me included) to malinger a bit. We forget...things. We cannot do some things or think that they do not matter. We don't take care with navigation as well as we should. We become a little apathetic - with good reason for everything becomes many times more difficult. A simple job which would take five minutes in the harbour may take an hour off shore. If it's rough perhaps it cannot be done at all....or it *seems* too difficult. Normally to do a bit of chart work is no great challenge, but when the motion is severe eighty percent of your metal effort may be used to prevent being "brained" by the cabin sides. How do you peel a spud with one hand... whilst holding on with the other??? Thus things are let slide. It is hard to explain it... things are different. It is just as real as on land... it is just different kind of reality.You are sort of being taken for a ride!!! Your control is not complete... You will be tired, cold, worried, wet and unsure. It could always get worse. Is there a lee shore? Will the rigging hold? The crew? How long will this blow last? Etc. etc..... This is how it seems to me. Perhaps you may be different.... Perhaps more practise changes things.... Any feedback?

A Canadian Page

From Roly Huebsch
'Polycats'



1.



2.

4.

3.

I enclose four snapshots, 1 and 2 are during and after the rolling of our second Narai MkII hull last summer. 3 shows some of the boats at last summer's Sail-In. In the foreground clockwise are Harry Ellis's Raka "Lanao" Alf Hickson's Hinemoa "Manuhiki", my Hina "Huaheine" (since sold) and Robert Bender's Hina "Cariad" (sailed on this occasion by my son Jonathan). In the distance Geoff Payne's Tangaroa can be seen above Lanao's bow, and Ernie Heard's Tangaroa and John Bellenger's Oro rafted together above Lanao's port cabin. Picture 4 shows Ernie & Margaret Heard aboard their Tangaroa "Cariad II"

Voyage to Multihull Meeting in Stavern - July 1981

by Tony Perridge

Tuesday, 14th July, 11.15 on a grey, warm morning, we left Inverness bound for Stavern in Norway. At last all the planning and organising was finished and if we've forgotten anything then it's just too bad. I was determined that this, my second trip to Norway in my Tangaroa "Faoileag" would not be a nerve-shattering shambles like the journey I made in 1979. To that end I had checked the boat from end to end and made various modifications to make sail handling easier, but, more importantly, I had decided to take along two companions, Crispin Phillips from Edinburgh, a friend of many years' standing and a dyed-in-the-wool monohuller, and Ted Strover from Germany – Ted answered an advert that I put in the "Sailorman" requesting crew members to help me out. He had never sailed a catamaran before although he was very experienced in sailing monohulls, and was interested in finding out what cats were like with a view to possibly buying one sometime in the future. Crispin was unable to join us until Friday, so Ted and I decided to sail along to Fraserburgh and meet him there.

The wind was a comfortable F.3 from the west so that meant a broad reach for the first twenty miles or so, with Faoileag strolling along at an easy 6 or 7 knots. I had fitted a speedometer for the first time, and was constantly surprised during this trip at how easily she reached these sorts of speeds in fairly light winds. She also went a lot faster than I had ever believed was possible, but more of that anon.

By four in the afternoon the wind had picked up to F.4 gusting 5, and with all sail up we were reaching 11 knots at times and things were getting a bit wet and bumpy, so I took off the main and we still made 7 knots, but a lot more comfortably. As the afternoon wore on, our course changed from N.E. to due E., bringing the wind dead astern, so I took off the mizzen to ease the steering a bit, but still we made 7 knots. By six o'clock in the evening, the wind having picked up to a steady F.5 from the West, we were sailing under only jib and storm-jib, and still the speedo registered 7 knots. I might have doubted its accuracy, but our progress along the coast confirmed it.

However a day of lumpy seas had taken its toll. I cooked a tea of mince and potatoes, but had to go on deck to eat it. My stomach churned and my mouth was dry and I found it almost impossible to swallow anything. I persevered grimly, knowing that my personal cure for sea sickness is to get food inside me, and after an hour or so I began to feel better. Ted was similarly affected, and had difficulty in keeping his food down.

Night came on and the wind eased and we put sail up again, although we were going well enough and I left off the main. The full moon rose, and all was peaceful, and we reached Fraserburgh at half-past one on the Wednesday morning, completing a passage in 15 hours for which I had allowed three days, just in case!

Fraserburgh is a fine port for a visiting yacht, being very easy to enter, and although it is a very busy fishing port, it is still reasonably clean and you can get an undisturbed night's sleep.

Crispin joined us on Thursday afternoon, but we decided to postpone our departure until the following morning, the benefit of a good night's sleep outweighing the time lost. So it was that at seven o'clock the next morning we motored out of harbour, put up all sail and pointed the boat towards Norway. During the day the wind gradually built up until by evening it was blowing F.5 from the North and we were belting along at ten knots for quite long bursts and I decided that, as we were cruising and not racing, a reduction in sail was called for. By midnight we were under only double-reefed foresail and single reefed mizzen and still making my now favourtie speed of 7 knots, broad-reaching over quite big waves, occasionally being walloped by the breaking crests.

During the early part of the day I locked in my latest self-steering device, a wind-vane operating a trim-tab on the port rudder, but to my disappointment, it didn't have enough power, and wouldn't hold the boat on course. However, I kept it coupled up because it helped to reduce the weather-helm that my boat develops when reaching fast. We had therefore to steer the whole time, working watches of three hours on and six off. This watch pattern worked very well, giving enough time off to get a decent amount of sleep and it also works out that you end up on a different watch time every day.

Early Saturday morning saw us half-way across, reaching under double reefed mizzen and double reefed foresail. I'm sure we could have gone quite a lot faster, but the seas were quite rough, and anything over 7 or 8 knots was very uncomfortable. Several times the speedometer went past its maximum of 12 knots; but while that sort of thing is fine when day-sailing it is altogether too hectic when on passage. I don't think I have the mentality of a record-breaker! We sustained some minor damage due to waves breaking between the hulls, dislodged decking and the like, most of it preventable with a little foresight. For instance, some of my deck-beams were not screwed in place, only held by the pressure of the deck-slats above them. When you do these jobs in the calm of the harbour, you tend to forget how a rough sea searches out every weakness . . . . .

At eleven o'clock in the morning I was on watch and once more locked in the self-steering to reduce the weather-helm which became rather wearing in the gusts of F.6 which periodically swept over us. While attending to various things such as filling in the log, adjusting sheets, making tea, etc., I would leave the wheel unattended for short periods, darting back and forth between job and wheel to keep her on course. Strangely, she never seemed to be off-course whenever I checked, until finally it penetrated my thick head that the self-steering was actually working. Apparently all it needed was enough wind. I went to bed at midday for an hour's rest very contented, but on surfacing two hours later observed Ted at the wheel. He pointed to the stern where a splintered stump was all that remained of my lovely self-steering, taken by a breaking sea. Ah, well, back to the drawing board for the Mk. 3 version (the Mk. 1I had thrown overboard on the previous trip).

Late on the second day the seas got very much bigger, but also longer and much more comfortable, confirming our position over the deep water of the Norwegian Trench, and at seven o'clock the next morning, Sunday, Crispin sighted land. In brilliant sunshine we ran in towards the coast and then followed it along until we spotted Tyvingen lighthouse at the entrance to Manne Fiord at whose head is Mandal where we tied up at half-past three on a roasting hot afternoon, 330 miles and 56 hours from Fraserburgh, an average of just under six knots. My comment in the log-book reads, "All in all, this has been the wettest trip yet, as far as flying spray is concerned. We seemed to submerge at Fraserburgh and come up at Mandal!"

We spent Monday resting and drying out and then left Mandal at one o'clock on Tuesday afternoon, motoring and sailing northwards among the many little islands along the coast. This is the finest sailing area I have ever seen with beautiful scenery, many boats, well buoyed and marked channels and in our case, superb sunny weather. It pays to be very careful with pilotage, though, for if you do get lost, there are so many islands that it is very hard to find your bearings again. We stayed among the islands as far as Kristiansands Fiord and then put out into the open sea, heading North for Stavern.

The whole excuse for this trip was the International Multihull Meeting, I.M.M. '81, organised by the Norwegian Multihull Sailing Club. As many as 60 boats were expected and it was even rumoured that one J. Wharram would be there.

As the sun went down on Tuesday evening so did the wind and right through the night until nearly midday on Wednesday it was all we would do to hold our own against the S-going current that runs down the coast at about 2 knots. Then a breeze came from the South and we were able to get moving again and spent the rest of the day sailing in bright sunshine with never less than a dozen other sailboats in sight, ranging from the ubiquitous Maxis by Pelle Peterson to traditional types like Colin Archers. At five in the afternoon I noted a large catamaran slowly coming up from astern and by half-past six it had drawn alongside. Everybody waved and shouted and then they slowly drew ahead.

As the evening turned to night the wind rose and we surfed up the coast in fine style with Ted at the wheel with a huge smile on his face every time she took off on that lovely, hissing glissade. In the stronger wind I was pleased to see that we were gaining ground on the big cat that had passed us. Then we reached the Rakke boene buoy and turned due North for the last 3 miles to the natural harbour at Staversoya. By now it was dark, but the sectored light at Vadhilmen led us between the island of Stavernsoya, which contained the harbour for which we were bound, and the main land. Then under engine we crept round the coast of the island until we came upon the entrance to the anchorage, which was only just visible in the light of my rather feeble torch. Once inside, all we could see was just a vague mass of boats, apparently filling the whole place. I put Faoileag alongside the nearest boat and we tied up to her and switched off the engine. We'd made it, in good order and on time.

A figure appeared on the boat alongside and said, "Where are you from?"

"Scotland", I replied.

"You came all the way from Scotland in THAT?"

"She did pretty well", I said.

"Of course you realise", the figure continued, "that the feller was drunk when he designed that boat".

The penny dropped! . . .

"Yes, I always thought he was a bit rough", I said.

"Hello, Jim!"

"Hello, Tony", said J. Wharram, Esq.,

The next three days were heaven on earth to a multihull sailor. Hours spent examining other people's boats, explaining the peculiarities of my boat to others, philosophising, sitting in the sun, and meeting some of the nicest people that it has been my fortune to come across. The variety of boats was amazing, ranging from tigerish racing tri's to dumpy, comfy cruising cats. Polynesian cats were well represented with two Tangaroas, two Narais, a Hinemoa, two Tanes, one Hina and a little 14 ft. fun-cat that Jim brought along on the roof of his car. There was a six-mile "family race" in which I distinguished myself by coming second last, but it really was a drifting match, conditions which Faoileag hates.

All too soon we were getting ready to leave. Eleven o'clock on Sunday morning, the 26th July, we rowed around the anchorage in the dinghy, saying our goodbyes, and promising to meet again at the next I.M.M. to be held in Goteborg, in Sweden in 1983. Then out to the open sea, all sail up in a favourable N.E. breeze, past the dismally tolling bell-buoy on the Rakke boene shoal and away, destination Scotland. The favourable breeze soon died, and for twenty-four hours we crept down the coast helped now by the current, but almost becalmed. We went into Lillesand for a fiendishly expensive shopping trip to stock up on stores, and then set out again and for

the first time since leaving Inverness we had to go to windward.

Monday night brought a gale warning and F. 6/7 from the West. We ended up with just double-reefed mizzen and storm jib, tacking backwards and forwards off the southern tip of Norway and getting absolutely nowhere. As the light dawned on Tuesday morning I realised that the waves were just stopping her in her tracks, and if we were ever going to get home, then more drive was needed. So I devised my "schooner rig", i.e. full mizzen, mizzen staysail, storm jib on the inner forestay and double-reefed foresail on the outer forestay. The difference was tremendous, and we started to make progress, but the motion was awful, and spray flew in a constant stream over the boat. To compensate, my little D.R. crosses once more began to move across the chart, and after four days, on the dawn of Saturday, we spotted the loom of Budian Ness light and shortly afterwards the lights of Aberdeen. A slow beat up the coast took us into the harbour at Peterhead, just in time for Crispin to get to the bus-station and catch his bus to Edinburgh.

Ted and I had a leisurely tea and strolled around the town before turning in for a blissful complete night's sleep. However, I was awakened at three o'clock the next morning by some joker untying all my mooring lines. Some people have a queer sense of humour. This incident, coupled with the filth and crowding in the harbour, has put Peterhead low on my list of desirable harbours, and we were not sorry to leave early next morning. After a drifting start, a fine S. breeze sped us round Kinairds Head and along the coast to the bonny fishing village of Portsoy where Ted and I spent a very pleasant evening relaxing and talking to the very friendly locals. They even remembered Faoileag from her visit there when I was single-handing to Norway in 1979.

The next day we carried on along the coast, and with the wind varying between N.W. and S.W. the boat steered herself most of the time. However, by midnight it became obvious that we were going to miss the tide into the Inverness Firth, so we went into the Cromarty Firth and anchored off the small village of Cromarty. I slept little, kept awake by the thumping of the rudder pintles as she moved to the waves in the rather exposed anchorage and was quite glad to make an early start for the last short leg of our journey. Just to prove that Sod's Law is alive and well, although the tide was with us, the wind was right on the nose, a combination which kicked up a steep, lumpy sea, She needed full sail to drive her through it, and it provided the sort of excitement I could have well done without. Ted steered the whole time, from 8.45 in the morning until we finally anchored at 2.30 that afternoon. I sat beside him, feathering the main to the gusts, and providing refreshments for us when conditions allowed. I was sure something would break, but my little boat is a lot tougher than I know, and just took it all.

So we came to the anchorage at Bunchrew on the Beauly Firth, and sheltered by the trees in the bay where she lies during the summer, the afternoon was suddenly warm and tranquil. Ted and I tidied ship, bagging the sails and talking about the trip. We'd covered twelve hundred miles in the three weeks and made a lot of new friends. Once again Faoileag had done me proud and looked after us all. She's a great boat!

Postscript.

Just a few random thoughts that have occurred to me. The rig that has been on Faoileag for the last six years is the Polynesian sprit rig, and it has performed very well, but I am changing it to a cutter rig with a Junk-type main sail. The reason for this is the ease of reefing and un-reefing the junk sail and I think that the fact that I will have the **correct** amount of sail up most of the time will compensate for that rig's comparative inefficiency to windward. I find with my present rig that, being the idle person I am, I leave reefing too late, and then don't shake out reefs when the wind decreases "in case it picks up again", because the whole process is so cumbersome.

The engine in my boat is a Reliant car engine and gearbox turning a propellor on the end of a twelve foot scaffold pole, a bit Heath Robinson, and the cause of much hilarity amongst marine engineers. The box in which it lives is not very waterproof (another thing designed in a calm harbour) and consequently the engine, wiring and all was frequently drenched by big dollops of salt water, yet not once did it fail to start when asked. It gives 23 h.p. but only weighs about 140 lbs all in; don't believe 'em when they say electrics and salt water don't mix, just keep spraying on the W.D. 40, you'll be allright.

While reaching at about 8 knots in a fairly big cross-swell, one of those sneaky, extra big and steep waves reared up and burst along the whole of the port side. Ted and I were on deck and Crispin was below and he said the crash was so loud it sounded "as though a car had run into us". It is difficult to estimate the angle to which she went over on the wave-face so I will only say it was helluva steep, but what was interesting was that I **saw** the whole boat skid bodily sideways before the impact of the breaking crest, and there was absolutely no sign that she wanted to go over. Well done, Jim, I reckon you've got your sums right. Despite this, Crispin maintained to the end of the trip that the boat was perpetually on the verge of turning over. He must be one of those die-hard monohullers that are never happy without a ton of lead under them.

When emptying a chemical toilet at sea in a good breeze, it is strongly recommended that you do so to **LEEWARD**, or you will appreciate the full meaning of the expression "getting your own back" .....

And as a final thought, look carefully at your boat's fittings and hatches, and if you can't swing on the former or turn a high pressure hose on the latter then don't take offshore.

Good Sailing to you.

P.S. Wanted — crew for the I.M.M. in Sweden in 1983. Book early to avoid disappointment!

Walked any good planks lately?

PIRACY — R. Woods

At a recent P.C.A. meeting on sea self-sufficiency I started a discussion on piracy, which produced a greater reaction than I had expected and so I am writing this article to outline some of the problems involved. It is a subject that is not often discussed, partly because it is part of the unromantic side of cruising and also because most people believe that piracy belongs in books on 18th century sea history and not the modern world. Unfortunately in many ways pirates pose a greater threat to sailors today than they have ever done in the past.

For example, an official U.S. Coastguard report claims that in recent years 300 yachts have disappeared under mysterious circumstances in the Carribbean, Michael Caine's new film "The Island" offers one solution for this alarming statistic, and although fanciful it may not be too far from the truth.

Obviously most pirates operate in the less civilised areas of the world and away from the major coastal shipping lanes and patrolled areas. For the cruising yachtsman this means that the danger areas seem to be between the West Indies and the Panama Canal, in the Red Sea - NE Africa area and in the Philippenes. So the threat of possible attack must be borne in mind when planning a world curise.

It appears that pirates attack yachtsman for two main reasons, although it is not piracy in the traditional sense as they are not usually after the cargo, but the yacht itself. Drug smugglers operating from Central America have to ship their drugs into the U.S. and one of the safest ways they found to do this is to attack a passing yacht, kill the crew and load the boat with their drugs. They then sail to the States sell the cargo and scuttle the boat. No trace remains that can lead back to the smugglers and the crew aand yacht become another addition to the 300 mysterious losses. The second reason is when the crew of a smaller boat take over a larger one, again killing the crew. They then leave their own boat and take the larger one to Europe or the U.S. to sell. It is thus not always wise to be in a secluded anchorage in an under-crewed large boat in company with a smaller one. **Unfortunately the pirates in this case are obviously yachtsmen as well.** In the poorest areas of the world traditional piracy does exist, boats being **attacked** for the money or goods on board.

All 3 cases show that pirates are more likely to attack the larger, faster and more expensive boats and so fortunately most cruising boats are more immune to attack.

If an author can begin his book with the words "My 16th Atlantic crossing was uneventful", one can be sure that the story of his voyaging would be incredible, yet in a radio interview to mark the launch of his book "The Incredible Voyage" Tristan Jones said that the thing that worried him most on his trip was the threat of piracy in the Red Sea and Carribbean in particular. He recommended that a cruising boat should be blue or white and have a blue mast so that it would merge into the sea. Also he advised never to approach another boat; but rather to turn and face them so as to offer the least area of exposure. Again the U.S. Coastguard recommend that yachts should not answer distress calls near Haiti unless they have been confirmed. Obviously they have discovered that many yachts have been lured to the pirates by hoax distress calls.

At the meeting I recounted a couple of stories that illustrated both types of attack. In one, a yacht was attacked close enough to the Columbian coast for a police patrol boat to see the incident and scare the pirates off. Unfortunately they were too late to save the lives of the crew as only one survived. Apparantly when they were attacked the crew tried to resist the boarding and all those on deck **had** been shot. The only survivor had been below deck.

Another story was about 3 boats in a Pacific anchorage. One boat left for Tahiti and was suprised a few days later when the larger of the other 2 boats sailed in with only the crew off the smaller boat on board. When questioned as to what had happened to the original crew all they got was the feeble reply "We decided to swop boats"

Another P.C.A. member told of how his boat had been attacked in the Red Sea. He had a gun thrust into his hand, but did not know how to use it; fortunately the rest of his crew managed to beat off the attack.

Yachtsmen are not only in danger at sea. There has been harassment from the shore ever since Slocum's days, although often nowadays it takes more than upended tacks to keep unwanted visitors off boats. Ironically this problem is due to the yachtsmen themselves because the local people believe (often quite rightly) that all yachtsmen belong to the idle rich and so can justifiably be robbed. This problem occurs most often in crowded anchorages especially, as in the Carribbean, when a lot of the boats are charter yachts. For example, one of the most famous beauty spots in the Carribbean are the Pitons where yachts can moor to coconut palms at the foot of an old volcano whose crags soar for thousands of feet sheer out of the sea. Unfortunately the locals have discovered that they can make an excellent living by blackmailing the bare-boat charter crews "If you don't pay us £5 we'll cast your boat adrift in the night". One also has to be careful about inviting people on board as crew or those who ask for a lift to the next port. This is not only a problem because of the threat of theft or attack but also from officialdom as many countries will not allow people ashore who do not have a return plane ticket. Some luckless owners have had either buy tickets for their unwanted crew or keep them on board.

Stories about pirates are very depressing and unfortunately as one cruises around one always hears more. So just what can be done to survive an attack? Unfortunately there are few ways and none of them are foolproof. Some readers may wonder whether it would be a good idea to carry arms on board. I have crewed on boats where other crew members always went ashore armed and had a suprisingly large arsenal on board. The problem is that to be an effective deterrent one has to shoot first and ask questions later. Most people have not shot to kill before and so one is bound to come off worst in an encounter with pirates - who make their living from doing just that. The story already recounted shows the danger involved in trying to resist an attack If you offer no resistance you may be lucky and survive (some people have been cast adrift in their liferafts).

One of the simplest and safest ways of repelling an attack was told in the well published story of a single-hander in the Phillipenes who successfully warded off an attack by describing his attackers to any listening shipping on his V.H.F. set.

Smugglers and pirates today are far less likely to be caught than in the past. 200 years ago all boats sailed at much the same speed and all were armed with relatively short range weapons. Nowadays pirates are most likely to have a high-speed power boat armed with a machine gun. It is well known that some of the fastest offshore power boats are used in the Pacific for smuggling as even coastguard patrol boats cannot catch up with a 60 knot power-boat. **Since most people do not survive a pirate attack** it is difficult to know how many pirates there are in the world and hence what the chances of such an attack would be. However most cruising yachtsmen agree that attacks are on the increase, but that the chances of any type of attack are greatly reduced if one has a small boat and sails along the normal cruising routes. If one wants to sail though known danger areas one should consider joining up with other yachts and sailing in convoy. (Always provided you know who you are joining with).

The Construction & Destruction of 'Joel 2:25', a Mk IV Tangaroa

COMMENCED BUILDING: July 23rd 1977

LAUNCHED: July 27th 1980

RUN DOWN BY AN OVERTAKING SUPERTANKER
and
LOST IN POSITION 43N 10W 20th November 1980

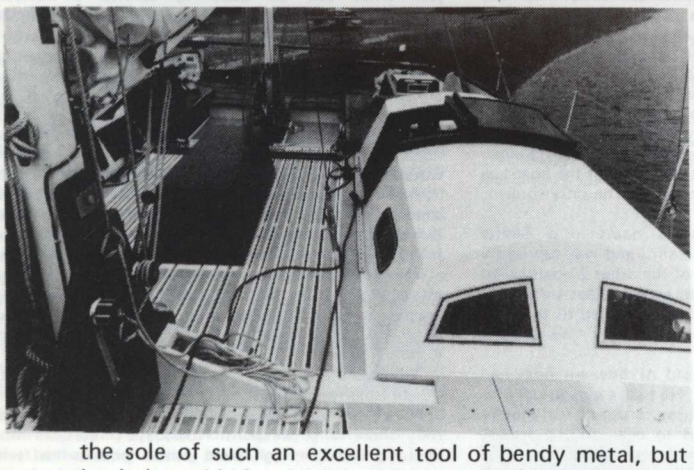
by Sam Nelson

Extended singlehanded trips in my Hinemoa "Silverheels" during 1975/6 showed that more space, more load and sail carrying power were essential for serious blue-water living and voyaging. I wrote to various designers and was eventually persuaded by James to build a Mk. IV Tangaroa.

I didn't have much money, other than that obtained for "Silverheels" (about £1,500) so had to look carefully before buying. Found a complete parcel of first quality timber and ply, originally intended for a Mk. I Tangaroa for £1,200, and obtained the lease of a really excellent shed 10 minutes walk from my house at a peppercorn rent. Had the luck to acquire an extra 10 sheets of 18mm Thames marine ply, with the unusual dimension of 8' x 5'. All the bulkheads, beam troughs cabin ends and some floorboards were made of this, and the extra 12" of width was most useful for the troughs and bulkheads, most of which had typical dimensions of around 4'9".

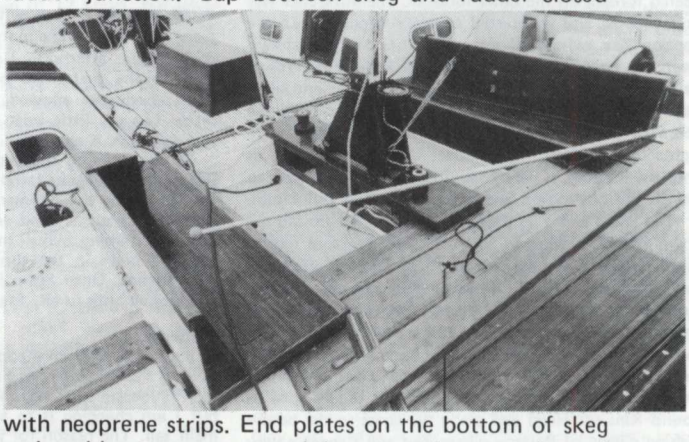
Fell ill with a very nasty gut problem after 6 months of part-time construction, and achieved very little over the next year. However, the ongoing committment to finish the boat was of great therapeutic help during this most difficult time. It was around now that my orientation changed: from wanting to build a fast boat I decided to build a beautiful boat.

Both hulls were built simultaneously side by side, and no major problems were found. One has to think big for such a project and no economies were attempted in the tool inventory. One of the best buys were a dozen joiners cramps (one-handed sliding cramps opening to 8"). Expensive but worth every penny. I also acquired an old shipwrights adze which was of great use, as was a good quality electric jigsaw with a pivoting foot. A B & D 5¼" self-powered saw with a tungsten tipped blade was in constant use. Its a shame that B & D make



the sole of such an excellent tool of bendy metal, but let it be said that it did everything it should have, and more. I was lucky in having an elderly Scottish foreman joiner as a friend, who taught me the importance of maintaining tools in razor-sharp condition. A self-evident but often neglected truth.

One reads occasional moans about Polycats failing to tack with certainty, and generally lacking manoeuvrability at slow speeds. This last is a feature of most multihulls, as anyone who has ever seen a VAL trimaran trying to dock or undock itself in a marina will know. I took very considerable trouble with all underwater surfaces, particularly the skegs and rudders. These were built and faired to a "Fat" aerofoil shape, 50mm wide at the skeg/rudder junction. Gap between skeg and rudder closed



with neoprene strips. End plates on the bottom of skeg and rudder to prevent end losses at slow speeds, and cavitation plates 2" below the waterline to minimise high speed losses. Tillers were laminated with a twelve degree inboard crank to provide Ackerman linkage. I was concerned to minimise leeway, and to this end put a minimum radius of about ½" on each side of the bottom keel planks. Two 12' lengths of 2" x 1" hardwood were fixed to lowest part of the keels to provide some protection when going aground, and also to provide a mini low aspect ratio keel profile. The handling when launched repaid all the care taken, the boat steered like a power boat, and leeway was not a problem.

The hulls were completely finished before turn over, the paint job being a major expenditure. I used 6 coats per hull of International Epoxide Resin composition, with Interpad epoxy filler between coats. Once you start such a scheme you must re-coat at a maximum of 12 hour intervals to get a chemical bond, so you forget about non-essentials such as sleeping nights. Finished with two coats of Extra hard racing antifouling below the waterline, two of International Perfection 709 on the topsides as an ultra-violet shield. This bonds chemically with the epoxide and when cured you have a very hard, flexible surface much harder than ordinary GRP gel coat, that will blunt a drill bit after a couple of holes. It is however fiendishly expensive.

My gut problem by this time was more or less stabilized, so long as I consumed large numbers of pills daily. The authorities quite correctly will not let an Air Traffic Controller talk to his clients while under the influence of drugs, so I found myself medically retired, and able to work on the boat full-time. Talk about clouds with silver linings! I started calling myself Nelson Boatbuilding, and doing woodworking jobs for various yachtowners in exchange for favours, such as 3 weeks work in exchange for precision made nylon bushed rudder fittings, plus high tensile beam bolts and nuts with 8mm plate washers, all triple plated.

I realised at this time that I was going to have a very nice boat at the end of the day, and became very careful not to "spoil the ship for a ha'porth of tar". Aluminium framed Lexan glazed windows were made to my own design, 24-off for £215! Pay cash, don't ask for an invoice, and the black economy strikes again.

There is no way that a multihull will perform worth a damn without purpose-built GOOD sails. These need not be too expensive, if you know what you want, and shop around. I got 8 sails: Mainsail, mizzen, mizzen staysail, staysail, No. 1 and No. 2 Yankee, 150% genoa and 800 sq. ft. spinnaker, bright yellow with a friendly looking Wharram Tiki in black, total £764 from Rockall Sails, Bosham, Sussex. Headsails were cut to accommodate a

two foot sag in the 34 foot forestay, no problem. I recommend Rockall Sails without reservation. Rigging was done by a local rigger, all stainless with swaged ends for £270. Not a lot more expensive than galvanised. Halliards flexible galvanised with rope tails, to avoid corrosion with masthead sheaves of aluminium.

Made the spars myself, box section scarfed Douglas Fir. The 34' mainmast was a major challenge, but came out very well. I became adept at making long cloches of polythene over masts, beams, etc., to assist in the heat cure of the Resorcinol glue. Cooked the main and mizzen masts together for 7 days at 75 degrees F. in January ! Mast fittings were made locally for me, satinised stainless steel, with black anodised track (Holt-Allen) total cost of the spars was under £300. The lowest quote for aluminium was £850.

Decks and cabins went on without too much difficulty, and at the end of July 1979 she was assembled within the shed, requiring only platforms, rudders and engine mounting. Bought a 15 HP Mariner Super Ultra Longshaft outboard engine, with an extra five inches added to the shaft to give an extraordinary transom height of 40". This was positioned on the centre line midships, with remote controls back to the cockpit. Oakeley Marine, Brighton, made up the engine, and David Oakeley's advice and engineering were spot on and to be recommended. He even delivers on time !

James' design was followed pretty much, without many modifications. Made the cabins a little longer, made a full width cockpit between the 3rd and 4th beams, and put in an extra beam, a hollow 6" x 2", two feet from the stern posts. Filled the gap to the 4th beam with a solid ply deck, that I had found most useful on "Silverheels". Made a rather nice curved laminated forward netting beam, and set this in ply mountings 12" in from the stem posts, pivoting in the same plane as the beams. Decided that the rear compartments were too poky, so made small streamlined cabin tops on slides instead of hatches. This gave excellent space for a super loo to port and bosuns store to stbd. There was room for a bunk if required instead of bosuns store.

All halliards were tightened by Barton winches, I also had a Barlow 2-speed for the outer headsails, a smaller Gibb self-tailer for the staysail, and the very excellent Gibb 007STA for the spinnaker. The outer headsails were sheeted right aft to a quarterblock each side, then correct lead was achieved by a barber hauler system. Both barber-hauler tackles, when fastened each side to a stanchion base forward, did away with the necessity for a spinnaker pole, the sheets being led through snatch blocks in the barber hauler system.

Started final finishing in mid-January 1980. Decks and upper works were finished the same as the hull sides, in white. Masked off to give a professional touch to the non-slip deck surface, which was grey Perfection 709 with 2 oz. grit added per 750 ml. This gave a fantastic non-slip surface, very durable and non-glare as well. When the masking tape came off the white borders and grey non-slip lozenge shapes looked terrific, so finished the platforms the same, only with cheaper paint. The hardwood surfaces, i.e. bulwark cappings, hatch sides, main hatches and slides, quarterdeck, trough covers and mast steps were finished with Deks Olje No. 1, with No. 2 as well on non-walking areas. This is really excellent though as usual expensive because of the quantities used. Never use polyureathane varnish on any areas exposed to sunlight, as it is not U/V stable and will be ruined after 12 months, when you have a problem getting the remains off.

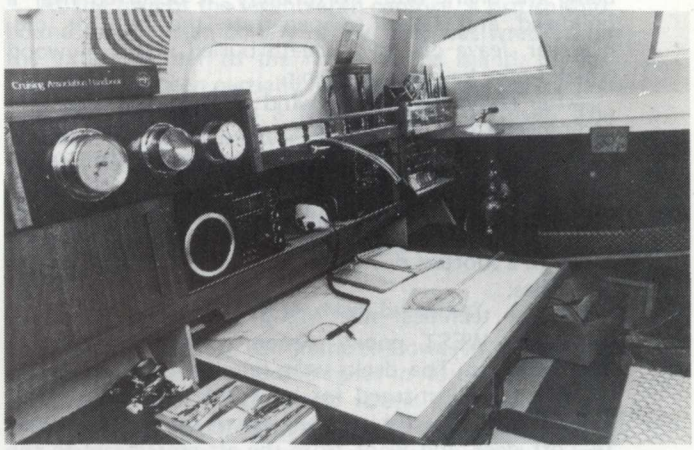
The exterior was finished by the end of April and I thought to launch but providentially remembered some advice from Ruth Wharram, that one should spend a few extra months to get properly finished. I therefore properly finished the interiors, with teak companionway ladders (Jim's design is no good for the middle-aged) finished interior edges with teak pin-rail, put varnished sliding doors on all cupboards, and gave all surfaces not varnished 3 coats of epoxide. Floorboards finished in white with grey non-slip areas to match the decks. A big navigation table with a 4' long seat, with storage for my 300 charts behind it, plus a comprehensive set of electronic goodies. Twin 70ah batteries fitted right aft in each hull, charged by a Honda generator. Total cost a little under £7,000, and worth about four times that.

Launching was a complicated tidal launch, but went well thanks to hiring a huge crane. After the usual hassle, she floated 4" below what I thought was the designed waterline (didn't you get the letter, Sam, said James!) but looked beautiful. My wife suggested the biblical reference Joel 2 verse 25 – "And I will restore to you the years the locust hath eaten" which fitted well. Fourteen 28" Gibb stanchions with double 5mm stainless steel lifelines around the perimeter greatly enhanced the feeling of security, and is worthwhile doing.

Gave a great deal of thought to efficient and comprehensive sail controls. I have mentioned the headsail controls earlier. Full width main and mizzen sheet tracks with travellers were fitted, giving two controls each for the mainsail and mizzen. The shape of the sail was set by the sheet tackle, the angle of attack adjusted by the track and traveller. Luffs were tensioned by halliard winches, foot by an outhaul tackle. Twist controlled by a kicking strap that converted to boom vangs, for running free without anxiety. Its fairly easy to get a boat to sail fast. Spend money !

I was very pleased to find that everything worked well first time, with a little tweaking, although as she was heavy one had to keep the right amount of sail up. This meant changing up as readily as changing down. With the big genny the boat performed well in light airs, tacked without hesitation between an easy 90 degrees, although I always sail a little free to minimise leeway and keep the speed up. "Joel" came into his own when the conditions were rough and going to windward offshore in a force 7, with 1 reef in the main, full mizzen, No. 2 Yankee and staysail was an exciting and exhilarating experience.

Spent 3 months cruising the Irish Sea, visiting James



and family at Milford while learning about the boat. At the end of October 1980 I set off for Spain, the Canaries, and wherever for 6 months. Got to La Coruna in 6 days from Milford Haven, which included 24 hours becalmed 80 miles north of the Spanish coast, and vile conditions in sea area Sole. Had 2 pleasant weeks in La Coruna then sailed on the 18th November bound for Cadiz, or Madeira, or maybe Barbados. Go badly thumped by a southerly gale on the 19th, and was hove-to for 10 hours on the night of the 19th/20th November. Daylight on the 20th brought sunlight and rapidly moderating conditions. I had made it to the sun, and during the morning got all sail up progressively. Finishing the noon sight I turned aft to go below and found a huge overtaking ship close astern.

I survived the resulting collision, but "Joel" did not. The shipping company involved acted very properly and I was promptly and generously compensated. I now have a very nice 31 foot professionally made catamaran that I might get to like one day. In the meantime, James Wharram's Mk. IV Tangaroa must be acknowledged as a formidable design indeed.

Over which horizon did you sail?

'WEI-JI' FROM NEW MEXICO TO HAWAII

by David Omick

I began building "Wei-ji" on a ranch in New Mexico in 1977. After two years of occasional, part-time work I completed her, sewed the sails and constructed a trailer to take her to the coast. I must admit here that my plan, from the start, was to sail her to Hawaii. She was launched in San Diego in early October and a week later we set sail for the Islands.

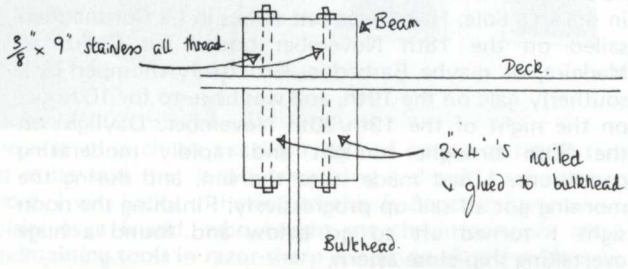
Unfortunately, a Mexican hurricane occurred unusually late in the season. While we were by no means in the cyclic part of the storm it apparently generated the gale we endured about 200 miles off the coast of Baja, California. The bad weather lasted about 3 days, with winds of 30–40 knots. Due to my inexperience in sailing her in heavy weather, I decided to abort the trip. After the gale had blown itself out we got sail on again and altered course for Cabo San Lucas, where we spent the next 3 months.

On February 7th, we were again on the way to Hawaii via the Revillagigedo Islands. Sailing among these islands was certainly one of the highlights of my sailing experience. I can still quite clearly recall San Benedicto-one of the world's most recent volcanoes – standing lifeless and forbidding at dusk, Socono Island rising up some 4,000 ft. above the sea, its verdant slopes rising to a peak shrouded in mist, and Clarion Island, steep and spectacular on the north side with gentle slopes coming down to a quiet bay on the south.

We left Clarion Island on February 15th and experienced light to moderate winds and generally clear weather to about 135 W. long., the only unusual incident being the shark bite. Fortunately, it occurred near a bulkhead and failed to penetrate the hull. It did, however, leave one of its teeth buried in the plywood which I now have as a souvenir.

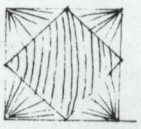
After about 135 W. the wind picked up considerably and ranged from 20–35 knots until we made land fall in Hilo on March 10th. The last ten days were rather rough, with intermittent rain. We then covered nearly 3,000 miles in 32 days (Cabo San Lucas – Hilo). On the 2,300 mile leg from Clarion – Hilo we averaged 100 miles a day with a shortest day's run of 30 miles and a longest of 125 miles.

On the technical side, Wei-ji was a Hinemoa built using the WEST epoxy system with the following modifications. The decks were raised 4" and a 1" x 2" toe rail was substituted for bulwarks thus giving more space below. The cabin tops were A-frame style about 14" off deck and went from the aft cross-beam to the mast beam. They gave adequate room below and were easy to build as well as aesthetically pleasing. The beams were mounted quite differently than shown in the plans – something like this:



I think this arrangement was rather simpler than beam chocks and as strong. The beams were well caulked and, despite the holes through the deck, never leaked a drop. However, I was always a bit uneasy about the beam mountings and, were I to do it again, would probably fasten the beams with rope lashings and avoid drilling holes through the beams. Nevertheless, she took some terrific knocks on occasion and never showed any sign of failure.

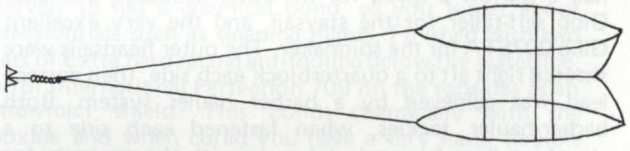
The rig was another departure from the plans. I used a rather short Bermudan rig. The mast was a 4" x 4" fir post 20 ft. long which was planed into an eight sided affair which, viewed from the top, looked something like this:



Two backstays, one rigged to each sternpost, made possible an 11 ft. boom. The main had an area of 100 sq. ft., the genoa about 85 sq. ft., and the jib about 65 sq. ft. The rig worked out quite well, having a low centre of effort, ample sail area and went to windward quite well. In addition we had a storm jib and trysail – both of about 20 sq. ft.

Two 12 ft. oars were auxilliary power in calms and harbours. The oars were used in oarlocks on the cabin tops and moved her surprisingly well. My technique was to lash the tiller amidship and steer entirely with the oars, pulling on one and pushing the other to turn. It worked well in all but the most congested waters as she needed about 24 ft. of side clearance with two 12 ft. oars.

In winds of up to 18–20 knots she self-steered on most points of sail using the sheet to tiller method. Above that, both wind strength and wave size demanded that she be steered by hand, sometimes dragging warp to help prevent surfing. In winds too strong to permit sailing (30 knots +) my technique was to sheet the storm jib flat amidships and stream 200–300 ft. of ½" polypropelene line in a bridle astern with an anchor and perhaps a fathom or two of chain fastened to the bridle at the centre:



She performed beautifully under this rig, allowing me to go below and read or sleep while she drifted slowly before the wind and waves.

Cooking was accomplished on a one-burner camp stove which could be moved to whichever was the windward hull. I took provisions for 6 months and 20 gallons of water in plastic antifreeze jugs which stowed nicely in the bilges. Leaving Cabo San lucas she was laden with 400–500 lbs. including my own weight, and carried it well.

In closing, I would like to say that my intention was to undertake this venture not as a stunt, but as a seaman-like voyage in a reliable, sea-worthy craft. Some years ago I sailed a 14 ft. West Wight Potter from Seattle, Washington, to Skogway, Alaska. Since that time I've come very much to appreciate the challenge and satisfaction involved in sailing small boats. The HINEMOA seemed to be the smallest and simplest craft available able to make the voyage and still have accommodation enough to allow me to carry on in a (more or less) competent manner. It was, and still is, my feeling that a large craft would have afforded only increased comfort and speed in exchange for increased complexity and far greater time and expense in building. Were either comfort or speed near the top of my priorities a seat on a 747 would perhaps have been more appropriate transportation than the deck of a HINEMOA. In retrospect, I must add that WEI-JI handled the trip much better than I.

SPINFISH TO THE SUN – Part Three

Some Windwards and Leewards, and the Passage Home

by Colin and Marylyn Ford

A beam wind with northgoing current enabled us to sail the 130 miles from Carlisle Bay, Barbados, to Fort-de-France, Martinique, in 23 hours. We passed between St. Lucia and Diamond Rock at dawn and were reminded of its glorious history: Admiral Hood put a small party of British sailors on this pinnacle rock and a ship's gun was hoisted up on sheerlegs. With this gun they dominated the passage between St. Lucia and Martinique for many months. Exhausted and overcome at last, the party was captured but the French commander ordered an immediate exchange of prisoners, praising their bravery and declaring, "Such men should not rot in prison."

Fort-de-France is extremely busy and has department stores and small shops, good chandleries and a large fresh produce market. The harbour is too crowded to swim in and so we drifted down the coast, leaving the Pitons of St. Lucia astern in the heat haze, and anchored off Saint Pierre. This used to be the capital until Mount Pele erupted towards the end of the last century. The ruined theatre is especially interesting.

Very light breezes made our crossing of the Dominica Passage uneventful, apart from the sighting of a beaked whale. Off Rosseau, however, a small gale sprang up and we decided to stand off. Continuing thick weather the next day decided us to make for Deshaies, Guadaloupe, a quiet, deep bay with good beach and fishing. Ashore, in the tropical rain forest, there are freshwater pools and breadfruit trees. In Deshaies we met Alain Lemaire, day-chartering his Narai "Phao" to the island's Club Mediterranee.

Antigua and Nevis

The Cliffs at the entrance to English Harbour, Antigua are distinctive – if you know what you are looking for. They resemble pillars yet this is only apparent from certain angles and in good light. A hazard is the reef close inshore to the west. Once inside Freeman's Bay all is calm and as we went up to the inner harbour we understood why it is such a famous hurricane anchorage. An early morning walk to Shirley Heights gave a panoramic view of both English and Falmouth harbours, the restored buildings of Nelson's dockyard standing out clearly. In the garden of Clarence House we picked up windfall bitter oranges and made marmalade and this, together with 'loose' rum from Diaz's, St. John, at £2 a gallon, more than offset harbour dues. Incidentally, English Harbour was the only harbour we visited which asked for money, though this did entitle one to use showers and laundry. Another recommendation for English Harbour for history buffs is the Thursday afternoon conducted walk in and around the Dockyard, given by local archaeologist, Desmond Nicholson. We spent some time in the harbour, meeting old friends and comparing notes. It was here that we decided to abandon the search for diaphragms for the galley foot pump and fit the ancient brass plunger pump that we always carry, ever since it took over from a modern bilge pump on our previous monohull whose garboards were leaking on a Channel crossing.

So many islands, which was our favourite? Certainly we all liked Nevis. The anchorage is in the roads off Charlestown and landing on the pier can be hazardous in heavy swell but once ashore it is a friendly 'laid back' place. Few yachts visit and tourism is strictly limited by the tiny landing strip. Pinney's Beach is 5 miles of silver sand, watched over by an old coconut plantation.Sugar used to be grown on the coastal plain around the central Mount Nevis. The abandoned sugar mills with their ruined stone windmills and heavy steam-driven machinery are picturesque but stern reminders of the immense labour involved in sugar production. There is a busy market to the right of the pier on a Saturday morning. Water is free but warm and brown.

The Virgin Islands and Bermuda

The Anegada Passage reminded us of what going to sea could be like and we thought of the competitors in the essentially multihull Tradewinds Race: St. Maarten–Martinique–Virgins–St. Maarten. The normally north-going current proved contrary and in freshening winds and poor visibility we entered the Francis Drake Channel via Flannagan Passage and made for Roadtown, Tortola. A former pirate lair as they preyed on "Stately Spanish galleons coming from the Isthmus", the Virgins are now the home of several bareboat charter companies. We were there in April, however, and saw far less activity than on our home Solent.

Wet and windy weather dominated the first half of the month but when it returned to normal (90°F) we tucked "Spinfish" up a mangrove creek and rubbed down and painted her topsides. We did a big store-up in Tortola, although American prices were sometimes steep. Note: although the American Virgins are cheek by jowl with the British islands, one needs a visa to enter their waters where patrol boats seek to enforce this requirement.

Hoping that the Northers had done their worst, we left the Virgins at the beginning of May and sailed North for Bermuda. Our attraction for calm weather proved irresistible and we were becalmed just north of the 5 miles deep Puerto Rican Trench. We continued in light headwinds, quite contrary to the pilot chart for May, crossed the Tropic of Cancer, and arrived at St. George's Harbour, Bermuda, one beautiful dawn, ghosting in through the Town Cut.

Bermuda has a despotic but sensible attitude towards Planning: no cars above 13ft length and only one car per household. In practise, however, small motorized cycles swarm like wasps. Buses are good and the trip from St. George's to Hamilton affords views of the beautiful sounds and islets.

At the turn of the seventeenth century, a British ship, bound for the then colony of Virginia, was wrecked on the extensive reef to the north of the island. Earlier, Bermuda had been partially cultivated by the Portuguese and pigs left there as a future supply of meat. The wrecked British vessel was rebuilt, incredibly, in a year and continued to Virginia. News of the rediscovery of the island could have reached England at about the time when Shakespeare was writing his play "The Tempest" and it is thought that he used Bermuda for his fabulous isle.

". . . and a grey dawn breaking"

We had decided to sail home to Cowes in one leg and in the event we sailed 3,600 miles in 40 days. We took an approximate Great Circle route and crossed the southern June ice limit but saw no bergs – although it was **cold**. Depressions and associated westerly winds hastened us on our way and during this time we were especially impressed with "Spinfish's" handling under reduced sail in heavy seas. This spanking progress did not last and an easterly gale heralded two weeks of high barometric pressure, 1046 millibars, and light easterly winds.

The sight of dolphins at sea always makes us happy and on the return trip we were able to stand in the forenet and watch them play between the hulls. Two sperm whales were sighted, blowing, a respectable distance astern, while graceful sheerwaters entertained us with their swooping flight. The children were especially interested in the many jelly fish and primitive saltwater life. Jacob, age 11, fabricated a small aquarium while Sasha, 13, sought to identify the species in an "Observer" book.

As we were on a shipping route we did see the occasional container ship and tanker and for this reason we kept 3-hour night watches. At one time a tanker, a small container ship and a yacht all appeared at once, 'It's getting crowded out here!', we thought The North

Atlantic is a cold, grey and lonely place and it was odd to think that contestants in the two handed Transatlantic race were battling it out a few hundred miles away. The BBC World Service gave gale warnings for the race and we found these helpful.

Home again

Once on the Continental Shelf the seas heaped up and turned a brownish-grey. Fishing boats were sighted and seabirds too: gulls, gannets, fulmars. Once the Lizard was sighted, we treated ourselves to a Channel Dinner of freshly caught mackerel and tinned roast beef. A final landfall in rain gave us a glimpse of the Needles and we made it into the Solent with a brisk southwesterly behind us just as the tide turned to ebb. We found it was hard to be give-way boat so often as our nerves were not attuned to traffic. It was a tremendous moment as we entered Cowes harbour with our foreign ensigns flying from the port rigging in the traditional manner.

Eleven months on board and almost 10,000 miles sailed, all well with crew and "Spinfish"; now back to school for us all until the next voyage. ●

INFO FROM ANTHEA

The Meeting here on the weekend of 18th/21st September was quite successful inspite of the terrible weather on Saturday which started at 1.0p.m. and went on until after midnight. About 30 turned up and managed to have a short sail on Saturday morning on Bob's Narai and Tom Kelly's Tangaroa. Also in Sandy Haven were Jim's Tehini, Don Melhuish's Tangaroa and Bernie & Kay Parsons' Tangaroa. Great fun was had with Jim's little 14 footer and that was able to sail in the shelter of the creek on Sunday morning, when the other boats did not venture out. There was a film show on Saturday night at Gellyswick Yacht Club. We showed The Building of Tehini, Family of Boats, Whitbread Round the World Race 1972, Robin Fautley's cine film of the 14 footer and some cine films taken by Earnuld Pearson. Some members met at a local hotel in Herbrandston on the Sunday for a drink and a chat before going down to the creek again or returning home.

New Zealand News from Wade Doak

Horace (Dobbs) has just left. We took him to sea aboard 'INTERLOCK' (Raka) and had a brief pleasant sail while he enjoyed the music up on our bows and while a girl did Tai Chi on the foredeck, but then it is mid-winter and a squall hit us, driving us home very wet. Our cat is a fine weather vessel, and it is most pleasant to huddle in the cabins in a driving rainstorm. Later in the day it turned up fine again. Anyway, Horace saw our set-up and we spent some days together. I took him down into the deepest forest glade on our land and he had a hot bath out under the stars with a glass of wine and flute music. So now, he's tasted of the lotus . . . . . Our lifestyle is very primitive and he seemed to cope admirably.

I have just completed another TV film which features our catamaran as a driving vessel — some nice helicopter shots, moving through tunnels, archways at the 'Poor Knights' (rocks). It is a film in which I explore the ecosystem of an offshore island, above and below water. I start in a coral tree 200 ft. down, and we rise up above the islands with the gannets. It was lots of fun. Films are very weird things — they get televised, and that's it. I purchased a copy of our dolphin film and it cost me $800! My contract promises me a copy of the latest film but it may be very dear to copy.

Horace didn't have much to suggest, re how I could make a visit to England. My books: Hodders, London, should be helpful. 3 are still in print, 'Islands of Survival' (the atoll one) 'Fishes of the New Zealand region' (fish behaviour) and 'The Cliffdwellers' (ecology of the 'Poor Knights' on which the film is based). I am just correcting galleys on my 7th book: 'Dolphin, Dolphin', which is 120,000 words, 100 colour pix, 10" x 8" due out later this year. Books are our only income — less than the dole, so we grow as much as we can and live very simple. A lady sent us $50 donation, so I am letter writing again. The silences are not intentional, and we sent mind waves out constantly. **Very** interested in the Russian birthing business (giving birth under water). We have quite a file on it and correspond with Jaques Mayol who was filming Charcovsky in Russia last May. Read Elaine Morgan's "Descent of Woman" re our descent from aquatic apes. (Simian Finn, the Irish Swimmer?)

No, I haven't attended a PCA meeting in Auckland — we seldom visit towns, but I do get their excellent newsletter and send them the odd bit of material. Jan and I shudder at the queer things people do with their Wharram cats. **All the things we love about ours — its simplicity, lack of clutter, free deck space, clean lines** — seem to get spoilt. People fail to appreciate what the philosophy is behind the design. But then, here are some very sweet ones, too. I suppose what it all boils down to is communication: If people had a clearer idea of what the Polycats virtues were and could decide whether it would fulfill their needs without gross adaptation, or choose another design. I suppose we are very lucky, in that we rise only 5½ ft. above our soles and hence have no headroom. But how many 36' sailing craft could a couple step on to and start sailing with no previous wind experience and find no pitfalls or bad habits? It all seems like a dream to us — even more so when we meet dolphins and get so involved we forget to handle the ship, only to find she is looking after herself. We joke about the dolphin mind handling the tiller while we all are in the bow net, but maybe, it is not a joke . . . .

I wish James could read my atoll book and then I could have a yarn with him, as it fits in so closely with his concepts in that 'Wooden Boat' article. Do you have another book on the assembly line? I lent my 'Two Girls, Two Catamarans to a Wharram cat enthusiast who had bad habits with books, but I did enjoy it in so many ways — it really has the qualities of a classic and deserves to be more widely known. I'd place it on the same shelf as Slocum's work, something that breaks new grounds.

To-day I have written 4,000 words already, an article 'Caring for our Sea Coast', so I am a bit punch drunk, pen-wise. I've already spent the $500 fee for it on trees for our land, so I hope it is accepted. This is the perfect time to plant trees, and they seem to be the best way to convert money into something worthwhile.

I wonder, if you've heard from Dr. Nicholas Webb yet. He visited us in May — a very nice young guy who played with Donald (the dolphin) in the latter, (Cornish) part of his itinerary. Nicholas wrote some fine papers on his boat-towing antics etc. Now he is inspired to get a Wharram cat and pursue dolphin research. He said, that we were carrying out his dream. He is very capable, both in electronics and animal behaviour — a little shy, but a person of depth. He said, he'd like to meet you. He lives in Scotland now. He was very interested in our windmill and buildings — low cost affairs. The windmill (Soma) makers have just built a 110 ft. steel sail vessel to export windmills around the Pacific. It will also be flagship for our anti-nuclear protest fleet to visit Vladivostok and the Trident base. Perhaps some Wharram cats may join the fleet. ●

* FOR SALE *

G.R.P. HINEMOA — Bermudan rig. Main Beams B.C. pine 1979. Mast 1980. Main, jib and genoa by Jeckells 1979. Gas cooker. Bunk cushions. Fisherman and CQR anchors. Beam troughs and bulkheads need some attention. Lying Milford Haven, Dyfed. £1,250

Bob Evans, St. Antonly, Church Rd., Llanstadwell, Nr. Milford Haven. Tel: Neyland (0646) 600575

A few thoughts on anchors

Anchors & chain are heavy and multihulls should be kept light, but they should also be kept off of breakwaters, rocks, reefs and breaking beaches.

Most bays & harbours have some swell so you will want bow & stern anchors to hold the boat into the swell. Add to this the fact that we aren't the only boat who has lost an anchor, we've met at least 4 others, and good anchors in the 20 to 40 pound size are very expensive. This means at least 3 good strong anchors.

Next chain—lots of it, at least 50ft. on each anchor. I know nylon is stronger, lighter and easier to handle, but it chafes. So unless you know for a fact that there is nothing on the bottom that will part that nice strong nylon, don't let it touch bottom. Now you need some way to winch up the anchor and all that heavy chain. A chain windlass is great if you can manage it, but we get by with two chain hooks. One on a short line at the bow and 20ft. of line on the other to take to the mast winch. Winch in, hook in the short line, move winching hook up and winch some more. Slow, but cheap & effective.

Anchor buoys, a good idea for several reasons. The primary one is get the anchor up if it gets caught under a rock or some other immovable object. Another is to get the anchor back if you do somehow lose it. Our 35 pound plough would'nt still be on the bottom of Mazatlan harbour if I had put a buoy on it. A third reason for the buoy is that it decreases the probability that another boat will anchor on top of your anchor. 20 to 30ft. of ¼" poly and a plastic jug is all it takes, and although it is a bit of a bother it is well worth it.

We also have a plastic jug on the bitter end just in case we have to cast off the anchor line in a hurry. Of course make sure the bitter end is tied off to something strong.

Bridles, for anchoring, but also used for sea anchors and drogues. One of the great advantages of the multihull is the ability to put a bridle on the anchor. Without the bridle we sail all over, but with it we sit more quietly than a heavy full keel mono. We use two strong snatch blocks on the float bows, and a 20ft. dock line with an eye splice. Tie the dock line to the end of the chain, or if in deeper water with a bowline type knot to the anchor line, drop the eye splice into one snatch block and run the anchor line through the other. By easing or tightening the anchor line you can adjust the angle the boat is pointing. For a parachute sea anchor, or drogue we take the two bridle lines to deck winches.

So that's about it. Types of anchor? One of each, they all work, better or worse depending on the bottom. If you do all this what you end up with is an anchoring system, not just something you throw over the side to park your boat. And when you are cruising it may be the most important system on the boat, as most of the time is spent at anchor. It is insurance and security so don't skimp here.

Our anchors, for a 36' Cat.

30lb. hi tensile Danforth, 85ft. 3/8" chain, 300 ft. 5/8" nylon
35lb. C.Q.R. plough (a lucky find in Mazatlan for $ 65.), 55ft. 5/16" chain, 200 ft. ½" nylon
22lb. Danforth, 45ft 5/16" chain, 200 ft. ½" nylon
5lb. hi tensile Danforth (a great little anchor but I wish it was the 12lb'er) 12ft. 5/16" chain, 200 ft. 3/8" nylon
5lb. folding grapple (for the dinghy) belongs to Thor.

(Reproduced by permission of BCMS)

From Lynn Fabian . . .

For myself, I'm eagerly awaiting this newsletter to see if someone has discovered the perfect anchor. In my own search to find a non-fouling single anchor, I tried a 33 lb Bruce last summer. More than one person recommended it to me, and an English magazine had a glowing report. At Neah Bay, the Bruce proved to dig in first try each time – in sharp contrast to the performance of CQR's used by many yachts. Also, it has not fouled the rode so far – in sharp contrast to Northills, and a friend's Danforth that almost had his boat on the breakwater. So, for much of the summer I was smiling and like a religious ad shouting, "I've found it!" Then, one blustery night, while watching the Coast Guard pull a boat off the breakwater, my ranges changed. The Tillium drug a boat's length then stopped. Several sleepless hours followed, but nothing more happened. Then, another windy day and a repeat.

Just enough to keep me alert and start me thinking, about why the anchor comes up so beautifully clean. What the ––––– is it doing down there ? ? Alas, I haven't had the courage to dive in the cold and somewhat murky water to find out. Well this coming season I'm putting on a heavier length of chain and keeping my Swedish Rock Anchor handy.

From Joe Dazey . . .

Unlike some of the contributors in this issue on anchoring, I am not particularly an expert on the subject, and certainly do not have their wide range of experience with different anchors; My purpose is merely to illuminate one small facet of how not to anchor.

Several years ago, the crew, the cat and I set sail for the San Juans. We met friends with a chartered monohull in Anacortes, and by evening we were poking around Barlow Bay looking for a place to drop the hook. "The hook", in this case, was of the size and type recommended by the designer of my boat and recommended by the anchor company for my size boat. It was fitted with chain of the recommended size and plenty of nylon rope. The bitter end was secured around the mast. I had used this equipment on two earlier occasions. Everything was under control. As the other skipper had no previous experience and was unfamiliar with his boat, I graciously (we all agreed) offered to let him raft alongside for the night. He accepted, and to an admiring and appreciative audience, I proceeded to anchor.

I found a likely spot according to the chart, sounded the depth with a lead line, allowed for the rise and fall of the tide, and calculated scope at a 7 to 1 ratio. With just a touch of sternway on, I lowered the anchor slowly over the side until it hit bottom and bit. I let out some more rode and backed down with the motor hard enough to set the anchor but not so hard as to pull it out. With the anchor holding and the sun setting, we settled down to crab fritattas and a bottle of wine.

It was a pleasant night. Quite calm, in fact, until 2.00 a.m. when a slight breeze came up. There was just the lightest hum of the breeze in the rigging and the gentle topping of a halyard against a mast. I went topside as the other skipper was tying off his halyard, to find the sky overcast, one inch ripples on the bay, and the shoreline gliding quietly past.

By the time the crews were on deck, we were dragging rapidly toward some pilings. We got the anchor and sixty pounds of seaweed on board, the motors started, and the boats separated. I turned to port towards the center of the bay. The other skipper turned to starboard directly toward another group of pilings. He turned to port missing the pilings by inches and directly into a dock. He turned again hard to port missing the dock by three feet. All with a boat he did not own. His crew was frantic. So was mine.

Cleaning the 60 pounds of weed from the anchor gave me a clue as to where I'd gone wrong. Under the anxious gaze of a suspicious and frightened audience, I anchored – sans weeds – and backed down hard on the rode. And again I backed down on it. And again! The other skipper came alongside and with restraint, asked only if I thought it would hold this time. I assured him that it would and that I would be standing anchor watch until sunrise. I spent the next four hours watching the shoreline and reflecting on my anchoring technique, which had almost claimed a boat and had cost me the respect and confidence of my friends, my crew, and my cat. I now have a much bigger anchor, and I am prepared to risk backstrain trying to break it loose in the morning I want that anchor dug in.

Someone once said that all philosophy is a footnote to Plato. If so, then cruising seamanship must be a footnote to Eric Hiscock, who observes about anchoring in one of his books (**Come Aboard,** I believe) that a chain in the locker never did anyone any good. To this I would add that wishful thinking does not mean your anchor will hold. Joe.

The Wishbone Anchor
from Jim Ruby . . .

Shortly described, the Wishbone anchor looks just like one, with an eye at the arch apex for the chain shackle, but with the base of the arch closed. Just above this base pivots a single, high tensile, wide and triangular fluke pointing toward the apex. Two sub plates attached to the other end of the fluke engage the base to control the "digging" angle.

We've not anchored where great forces of wind and wave have taxed the wishbone, but the manufacturer's claims of non-fouling, self-resetting with tide and wind changes, and its ability to penetrate weed and hold in most bottoms seems justified.

The sales demonstration movie, comparing "Y" (CQR) and "X" (Danforth) is a very convincing credit to this new lightweight hook. (The X and Y looked rather pathetic in all tests.) Dragging the anchor along the beach; trying to foul it and twist it out and turn it over with normal scope is a revelation.

Our only complaint to date is that we almost had to leave it on the bottom of Blakly Harbour but managed to grunt and winch it to the surface, under an enormous mound of clay, sand and gravel; perhaps 80 or 90 pounds worth.

While not heavily promoted lately (with sand box demos at your local dealer) the wishbone seems a significant advancement worth hanging your boat on.

Jim

ANCHORING: Thirteen Years of Misadventure
from Bob Dean . . .

We bought our first large trimaran, a 40 ft. Victress, in July 1968. After a great deal of reading, talking, and mental anguish, I decided on ground tackle consisting of 12, 20, and 35 bound hi-tensile Danforth anchors with two 300 ft. lengths of half-inch nylon and two 40 ft. lengths quarter-inch chain.

It wasn't until July 1980, shortly before leaving for the South Pacific, however, that I got around to buying the 35 pound Danforth. Prior to that time, we relied on the 20 pounder, and in my naievete, I assumed that difficulties of setting the anchor, fouling with seeds, and occassional dragging were an integral part of the anchoring experience.

It was somewhat of a surprise to discover that the 15 pound difference between 20 and 35 pound anchors is barely noticeable, especially when the anchor is supported by the buoyancy of the water. The 35 pounder seemed to be significantly superior to the 20 pounder, especially with regard to ease of getting the thing to dig in. We never again used the 20 pound Danforth.

We spent three months cruising Southern California relying entirely on the 35 pound Danforth, before setting sail for Polynesia. Shortly before leaving, following the advice of some of the more experienced Southern California sailors, I purchased a 35 pound CQR plow.

During our 12 months in Polynesia, we had numerous opportunities to compare the 35 pound Danforth with the 35 pound plow, and in every instance the Danforth came out second rate. On packed coral sand, the Plow would dig in right away, but the Danforth would simply slide across the top. When anchored bow-to at the

Papeete quai with a mud bottom, the Plow would dig in but there were some instances when we were able to pull the Danforth all the way up to the stern using the anchor winches. We saw one yacht with the same anchoring combination in which the Danforth flukes had been bent double by coral rock, whereas the Plow had held without damage.

We eventually stopped using the Danforth altogether, except in those situations where we felt we had to have two anchors out. Our experience seemed to be typical of those yachts which had both Danforth and Plow anchors. Everyone tended to look upon the Danforth anchors as a joke.

While in Polynesia we also discovered the value of all-chain anchor rode. When anchored in 35 feet of water, it was not unusual for the coral heads with their razor sharp edges to come within eight feet of the surface. Even a minor shift in wind direction could start the coral chewing on a nylon anchor line. There was a Seattle trimaran permanently planted on the reef at Bora Bora because of this problem.

We bought chain in Papeete and thereafter our standard set-up was 200 feet of quarter-inch chain with a 35 pound Plow. This was a good rig, but was still too light to permit leaving the boat alone for any extensive period of time. We couldn't help but envy some of the monohull guys with their 80 pound anchors and three-eights chain who were able to let their boats take care of themselves for weeks at a stretch.

We had an anchor winch mounted on the foredeck, but rarely used it because it was faster to pull the rode in by hand. The anchor roller, on the other hand, was absolutely essential, specially after we had switched to all-chain.

For some time, however, my wife had been hasseling me about the new Bruce anchor, so finally, just to shut her up, we bought a 33 pounder. The end result, after a year and a half in the water, is that we now anchor exclusively with the Bruce. Unlike the Danforth, we have never had a Plow fail to dig in, nor have we ever had a Plow drag, consequently the apparent advantages of the Bruce over the Plow are much less dramatic than those of the Plow over the Danforth. In fact, the differences between the Bruce and Plow are so subtle that I wouldn't even try to argue the case. In general, though, the Bruce seems to dig in quicker and to have a better bite, especially with short scope. When being set the Plow may drag for ten feet or so, whereas the Bruce digs in almost immediately. When raising the anchor, the Plow pops out fairly easily when the rode is vertical, whereas the Bruce invariably puts up a fight. We have never had either anchor foul with weeds (unlike our experiences with the Danforth) and we have never had to reset either anchor.

If we ever work up enough courage to go ocean cruising again, my intentions are to have two 33 pound Bruces, one 35 pound Plow, 200 ft. of five-sixteenths chain, three 40 foot lengths of five-sixteenths chain, and two 300 ft. half-inch nylon lines. Any reservations about weight will be resolved by eliminating one crewman, which is equivalent to about 750 lbs. For regular anchoring we will use all chain and one of the Bruces. If we need to set up a semi-permanent mooring we will set all three anchors in tendem, connected with the 40 ft. lengths of chain, and use both chain and nylon rode connected to the lead anchor.

Past experience, however, indicates that I have yet to be right about any aspect of anchoring; experience has always shown a better way. I have also found that the advice of other sailors is pretty much of a "crap shoot", with bad advice far outnumbering the good. Moreover, there appears to be little relationship between the value of advice and the experience of the sailor or the logic of his arguments. Which is something the reader might take into consideration with regard to what I've written here.

Editor's Note: It seems as the articles progress, they get heavier and heavier. As we move into the makings of a double issue here, we continue with one for all you who really want to have your boats stay in one place.

(on mooring buoy set-up, as presented at the Feb. meeting). from Monte Kimball . . .

Here goes a try at explaining a complex process, without the aid of pictures, regarding my method of anchoring at my mooring.

I cast two concrete anchors, re-inforced with nails and any piece of scrap steel I could find about 14 inches thick at the center and about 4' in diameter. They were mushroom shaped with 4 scalloped edges, with each anchor perhaps about 450 lbs. The form, made in my back yard, with a shovel on a level piece of ground with a sheet of plastic laid in the depression using a 17' long piece of 1" diameter rebar for the shank and eye to tie the anchor rope to. I got a friend with a car wrecking tow truck to haul them down to the boat launching ramp. The steel 1" rebar was quite rusty so I gave each one several coats of epoxy at the eye. I wrapped several layers of 2" wide fiberglass and epoxied them, so as to make a bigger diameter to tie a rope to.

We laid about a 6" or 7" diameter pole from the main hull to ama on both sides near the bow and winched the big anchors up to them. They were almost clear of the water. We tied them to the poles with cheap poly-propelene rope and got everything we were to put on them shackeled in place with anchor ropes tied on. The shackels I used were 1" diameter pins. We sailed over to where we wanted to drop them, cut the cheap poly-propelene rope and let them drop.

This spring I replaced all the 3/4" nylon anchor rope with new rope. I have motor boats buzzing around me every good dag so the anchor lines must be kept deep enough that they won't fowl their propellers. It seems a line of gallon plastic bottles from boat to shore doesn't suggest anything to some people, as I have had one line cut by a motor boat.

I discovered it was one hell of a chore to pick up my anchor lines after wind and tide caused them to drift as much as 50' from where I had last unhokked from them. My outboard is located on a bracket behind the rudder and whoever is running it has to have another person act as lookout hollering directions also difficult to hear above the outboard. After several passes with someone out on the bow with a boathook, it became obvious a better system had to be worked out. In addition, there was a problem of keeping the mooring lines from having too much slack at low tide, since in a high wind at a low tide the boat tended to surge around like a frightened animal in a pen.

Since our wind storms are the most severe from the Southwest and Northeast, it was best to anchor with the bow anchored to point to the Northwest, then running the stern mooring to a piling about 350 feet to the South-east. I found if in a high wind the sails were both directly lined up with the wind, the windward sail caused some turbulance to the other, which is probably just as well to avoid, but so far I haven't encountered any problems worth worrying about by the sails being in line.

As for the problem at low tide, to keep the boat from surging around in storm conditions, there had to be a way to take up the slack at low tide, but not to be too tight at high tide. The bow anchor is in about 30' of water, so it was quite easy to help that situation by using a tire as a snubber connected to another larger grabber-like tire filled with rocks about 20 feet closer to the boat, that would lift off the bottom if the anchor line became tight. Also, about 50 feet from the bow of the boat, a good big float that would take 75 lbs to sink it, tied at the right distance between anchor and boat so at high tide it would be pulled under water about 4 or 5 feet. About 10' from the bow another float that held up a tire with some rocks in it, tied about 8 feet in line with piling to sink that line so it can be sailed over, even with dagger boards down. At the stern, about 10' back, another good sized float; towards the bow about 8' another weighted tire and back of the float about 8' another weighted tire to keep the line back to the piling below propeller reach. At the piling are three regular sized tires in line, acting as snubbers to take up shock. The stern line anchor line is cleated to the cleat on the ama, with a line running from a point about 2 feet from the float towards the ama, tied with a camel hitch, which won't slip either way, over to the stern cleat on the main hull, with a tire tied in between as a snubber to take up shock and also to distribute the load between two cleats. It also keeps the line half way between the main hull and the ama so as not to get tangled up in the rudder. At the bow is another line with a tire tied in between as a snubber does the same job as just described.

There is another concrete anchor dropped to the West of the boat in about 35 to 40 feet of water, which is hooked up with two more floats and tires as with the bow anchor. The only difference is an additional two concrete building blocks under the boat in line with a side cleat and its anchor, tied to the float nearest the boat, with a weighted tire about 8' towards the blocks to keep that float also in the same position whether high or low tide or in any wind condition.

With all those weighted tires and floats the boat can't get much momentum built up to pull ropes apart. Also, with 9 tires all acting as snubbers, it just can't come to an instant dead stop. Hopefully there won't be over a one ton pull on any one of those ropes at one time.

I found that a commercially made snubber (a rubber extrusion with an eye in each end,) wasn't half as effective as a tire. I had bought 4 of them a year ago, the largest size and at $6 each, found it was a waste of money.

As for the manouvering, I've been out practising and with a few more refinements, can pick up the mooring buoys just using the sails to manouver.

Hope this has been somewhat understandable.

Monte

from Sue Hansen . . .

While not even beginning to know enough to spar with the experts on the finer points of anchoring, I have a bit of perspective on the role of the crews of dragging vessels, gained at the age of 15 one stormy night while anchored in Fossil Bay on Sucia Island. We were cruising with two small power boats, and being the biggest boat of the bunch – 50' – we served as the anchor vessel for the raft. Despite having a ton of chain and an anchor much too heavy for me to lift then, it didn't take more than a few minutes watching the shoreline in the darkness for my dad to realize he'd have to put on his pants and do something, as the distance to the other end of the bay was steadily closing. He started up the engine, put me at wheel, and groped his way out to the bow to assist the power winch in pulling up some of the scope – all chain – so we could re-anchor. Meanwhile the skipper of one of the small boats started up his engine, and still in his pyjamas, now soaking helped both with the manouvering of his boat and on deck keeping the two boats from bashing each other together, re-setting fenders, etc. So far it was just a typical miserable cold night of anchor dragging. What I remember,iis that the skipper (and wife) of the other boat tied alongside never even poked his head out far enough to give any hint he was aware of all the agony we were suffering, or how we were busy saving his skin. At first we made a few jokes hollering back and forth in the wind about them being newlyweds, etc. etc., fully expecting him to show any minute. But he never did. As the winch droned on and the two engines idled back up to the head of the bay to re-set the anchor, we lost our charitable sense of humor, and in our shivering state of misery formed a new opinion of his desirability as a cruising companion.

Any moral must be obvious. It's a situation that seems inevitable for any cruising boat to have from time to time, no matter what the anchor, and the willing spirit and morale of those depending on each other can make all the difference.

(Courtesy of North West Multihull Association)

Haven Multihulls

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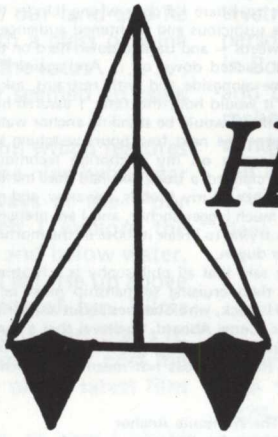

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SALES AND WANTS REGISTER

Norman Ellis, who has been ill lately (hope all goes well now Norman), has written to complain that there has been relatively no feed back from the Sales and Wants Register. He has sent out nearly all the info sheets to would-be customers but he needs to know if the boats are sold or not.

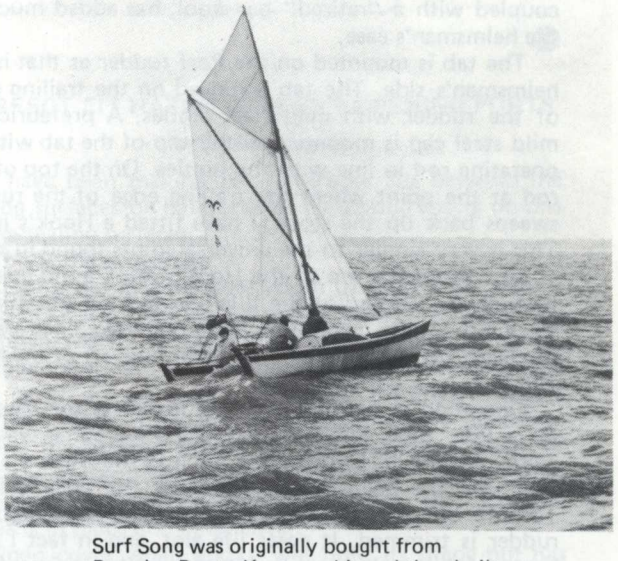
Please if you wish to use his services:–

1. Let him know when a boat is sold or send further information sheets for other customers.
2. If you make an enquiry please return info sheets you do not use.
3. Enclose enough to cover all postage etc.

BOATS CURRENTLY ON THE REGISTER

ORO – "Spinfish"
ORO – "Cornish Kangaroo"
ORO – "Illa Manu"
ORO – "Katitoo"
TANGAROA – (V Smith's)
TANE – "Unity"
TANE – (F Sporik's)
HINA – (M Barker's)
HINEMOA – (Surf Song)

Hinemoa · Surf Song FOR SALE



Surf Song was originally bought from Bromley Boats, Kent as a kit and then built in accordance with James Wharram plans. Subsequent modifications include additions to the existing Wharram sail plan and longer, weatherproof cabin tops for offshore sailing. The cat is well maintained and sailed frequently.

Hulls: Professionaly moulded GRP by Bromley Boats with blue plywood bulwarks which are oiled on the inside adjacent to the cream coloured Decolay painted plywood decks and cabins.

Rig: Standard 173 sq. ft. Wharram sprit rig with taller varnished solid(grown) spruce mast to carry topsail, flying jib and spinnaker. Jib 60 sq. ft., main 114 sq. ft., topsail 30 sq. ft., flying jib 90 sq. ft., spinnaker 120 sq. ft., storm trysail 45 sq. ft. Main and spinnaker by Jeckells; new jib (this season), topsail, flying jib and topsail by local sailmakers Wilkinsons.

Other goodies: Two 15lb anchors and warp. 40+ Seagull outboard–5 knots in favourable conditions. 0–15 knots VDO Sumlog–12 knots achieved in flat water, 15+ surfing! Sportyak plastic dinghy. Easily erected deck tent (also mad by Wilkinson Sails) covers cabins and bridge deaks and is clipped onto bulwarks–gives sitting headroom.

Sailing History: Sailed on the Clyde and Irish Sea. Cruised extensively East Coast and southern North Sea especially Holand.

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The Boatyard II

TRIM TAB

by Bob Evans

Having flown from the Stringbag to the Phantom I have become used to being able to trim out the control forces.

My Narai is tiller steered and can be jolly hardwork at times, hence I fitted a trim tab to one rudder. This coupled with a "retired" bar stool, has added much to the helmsman's ease.

The tab is mounted on the Port rudder as that is the helmsman's side. The tab is hinged on the trailing edge of the rudder with mild steel pintles. A prefabricated mild steel cap is mounted on the top of the tab with an operating rod in line with the pintles. On the top of the rod at the point where the trailing edge of the rudder sweeps back up the stock, I have fitted a Hook's joint. This is very similar to the universal joints found in socket sets. From the top of the Hook's joint, a rod goes up through the aft end of the tiller, to the top of which is mounted a yoke. From the yoke, two yoke lines are fed to cleats, on either side of the tiller, just aft of the hand grip.

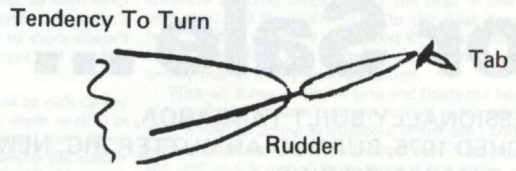
Operation is simple. Take for instance, the vessel is on a Port tack. She will naturally have some weather helm i.e. tend to turn to Port, up into the wind. To prevent this, the helmsman has to push the tiller to Port. To trim out, he pulls the Port yoke line and bingo the rudder is trimmed. It eases life alot, and in fact I have kept a full watch from my chartroom hatch in a force 7, being shortened down to No.1 jib and mizen having trimmed the helm.

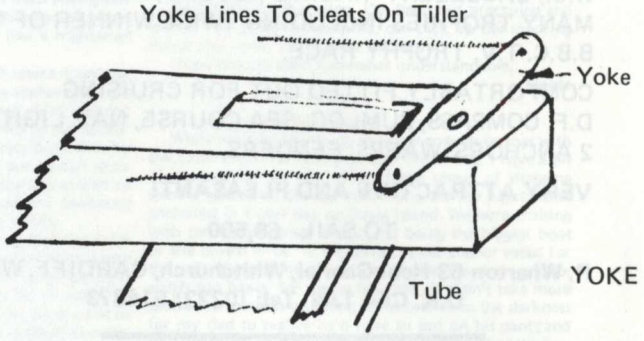
I have kept dimensions off the sketches for clarity, but have used:-

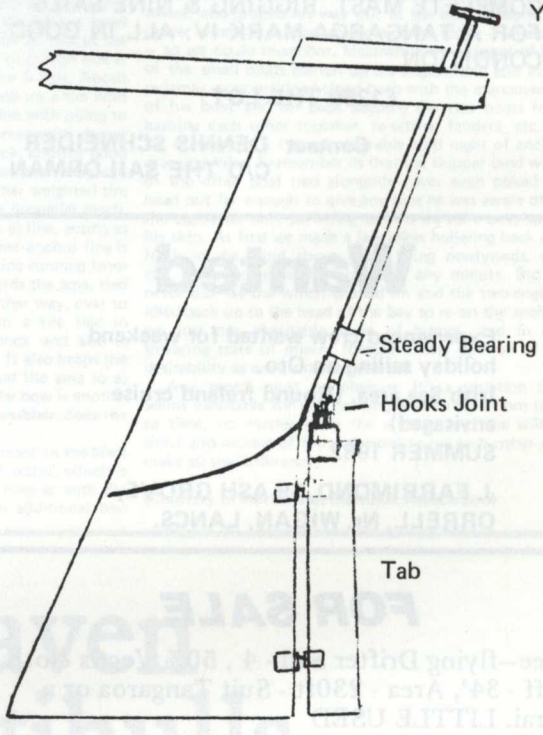
Tab chord	– 4"
Tab height	– almost the full length of the rudder's vertical trailing edge.
Tab thickness	– same as rudder blades.
Operating rod	– ½" brass tube. A bit light and has tendancy to twist.
Distance across yoke	– 6"
Tab pintles	– made up of 1" x ¼" thick mild steel. 5/16" diameter pins. The female pintle should have ½" thickness to run in on the rudder side to spread the load and wear.

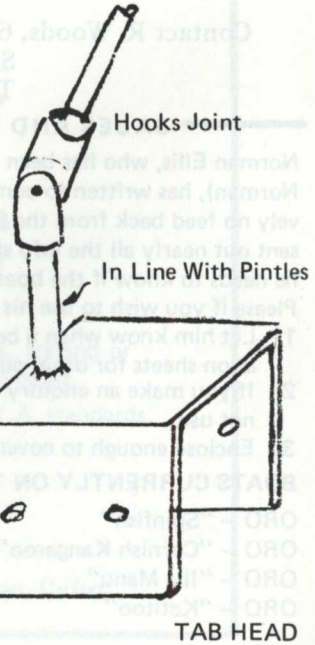
The system is simple and has bags of room for improvement, such as Tufnal or nylon bearings for the pintles. The yoke lines could be dispensed with and a single stiff rod linkage put in with a knob and lead screw to operate it. It could also form the basis of a wind-driven self steering gear mounted on the rudder stock.

Get trimming!

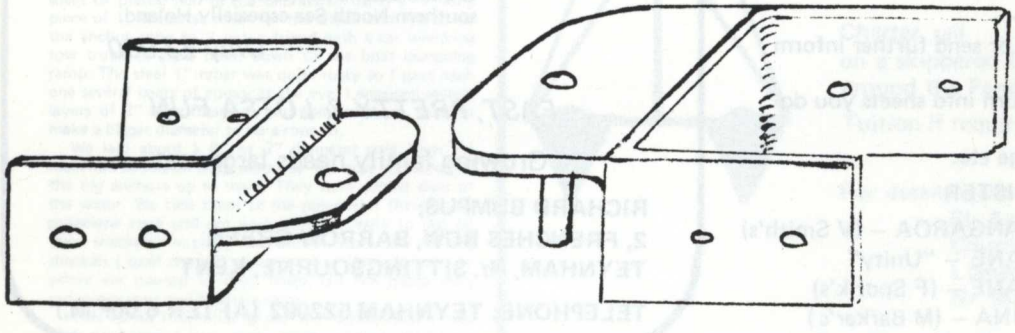








TAB PINTLES



A VORTEX GENERATOR AND A NEW RUDDER

Fred Potman (owner of Raka named 'Raka')

Last year I was in hospital, with a broken leg. On my request Nico sent me a letter with a sketch, and motives about using a horizontal flat plank under the middle of the keel of a Wharram catamaran. This should have the same effect as the small keel I was using up till then. That means higher sailing on the wind, faster tacking, and as a consequence less draught than with that small keel.

For a Hina and a Tane the dimensions of such a plank are about 75 cm. long (2.5 f.t) and wide 30 cm (1 ft.), thickness 18 mm (0.7 inch). For our Raka I used a plank long 85 cm, wide 38 cm, thick 2.5 cm. I made it from rests of ply glued together, a bit pointed for and aft,(1) see the drawing, the sides too (3), narrower at the bottom than at the top of the plank.

The effect must be that about 10 to 12 cm on each side of the keel sticks out. The whole is fixed by screws to the bottom of the boat. After a season of sailing I can say that I am content., more than content.

I did not get the impression that she is slower now. She sails as good on the wind as before with the steel keels, and tacks as well too. Slowly and in a solemn way, but impressive, even in heavy waves. What does a man wish more. I did. I didn't use the planks for sailing only, but wanted them to protect the new balanced rudders, when the boat is standing on the (hard) sands and that they do marvellously.

When I built the Raka I didn't use the rudders as drawn by Wharram, but put vertical rudders through the hulls in a classical way after smaller skegs. The rudder-blades became more effective even with the smaller areas. The skegs I put before the rudders, I took off this spring. The rudders were enlarged before the original front. This was done after a drawing made by Janbart de Jong (designer of Wadkat and Wadvogel) on full scale. Rudders with a nice profile. Originally they had a thickness of 3 cm. with a nice profile, but this was not thick enough. When the rudders were enlarged at the front, by epoxy kit, on both sides I glued slats in vertical direction, making them thinner forward and at the afterend, to get a new profile when covered with ply. The interior of the rudders I filled with foam, the top end I covered with epoxy. At the bottom a bottom piece of wood was glued. They are 7 cm. thick now and there is no cavitation anymore.

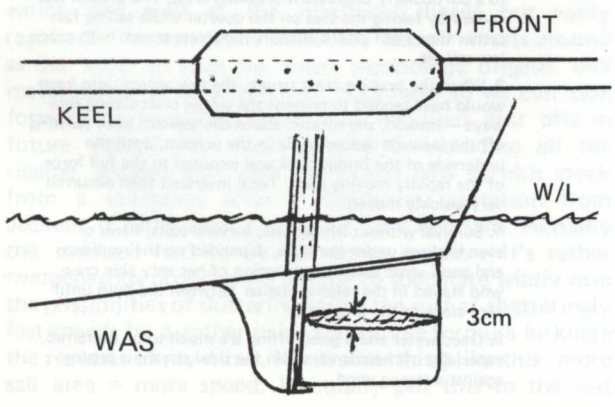
I have the impression that both changes mean quite an improvement.

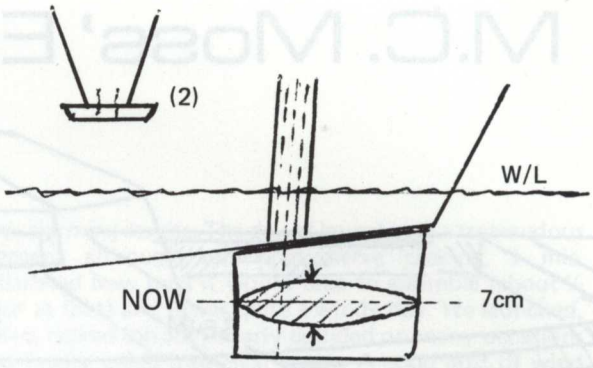
When we lie on the sands the rudders keep about 5 cm. free from the sands. For security I put four buckets of water on the stem, so that the boat, when lifting, with the water tends to hang a bit in the nose.

In order to get maximum protection of the planks I put them (30 cm.) a bit near the stern under the bottom, giving more grip.

I intend to make the motor turn with the rudders next year. Drawings are not ready yet. I tell you about it later. I am full of plans, but what do you want, a man is always busy doing things and undoing them sometimes. (Fiddling around you can call it !)

(Transl. Nico Boon)





PERFECT-FIT HATCH COVERS & OPENING PORTS

by Waldo Coons

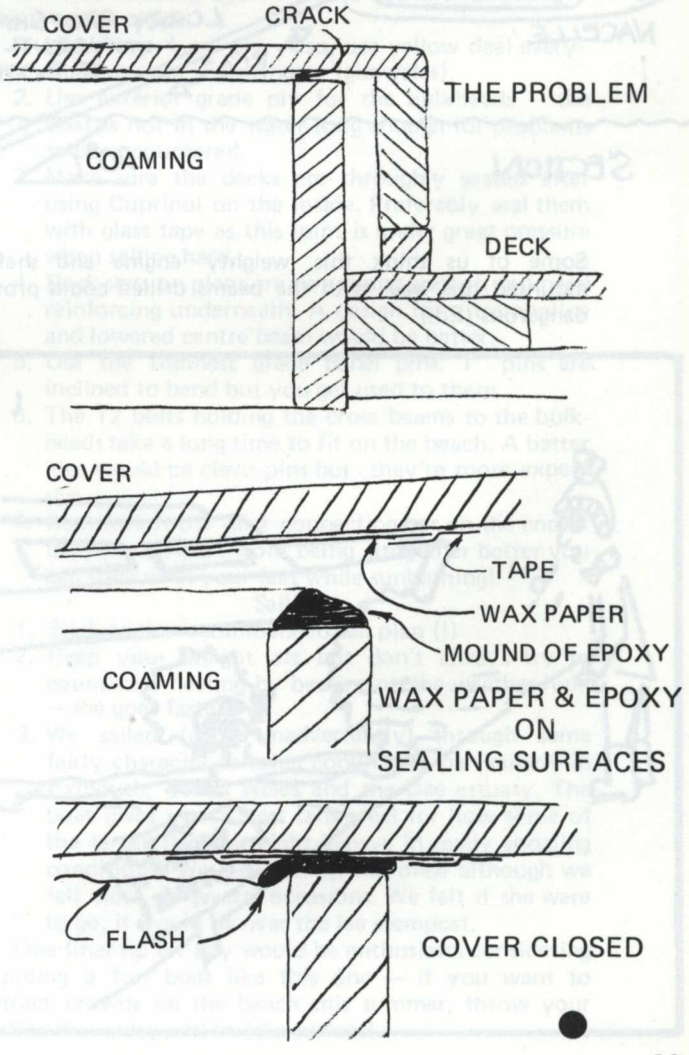
I have been making zero clearance fits between the sealing surfaces on hatch covers by casting epoxy on one of the sealing surfaces.

This is the procedure:—

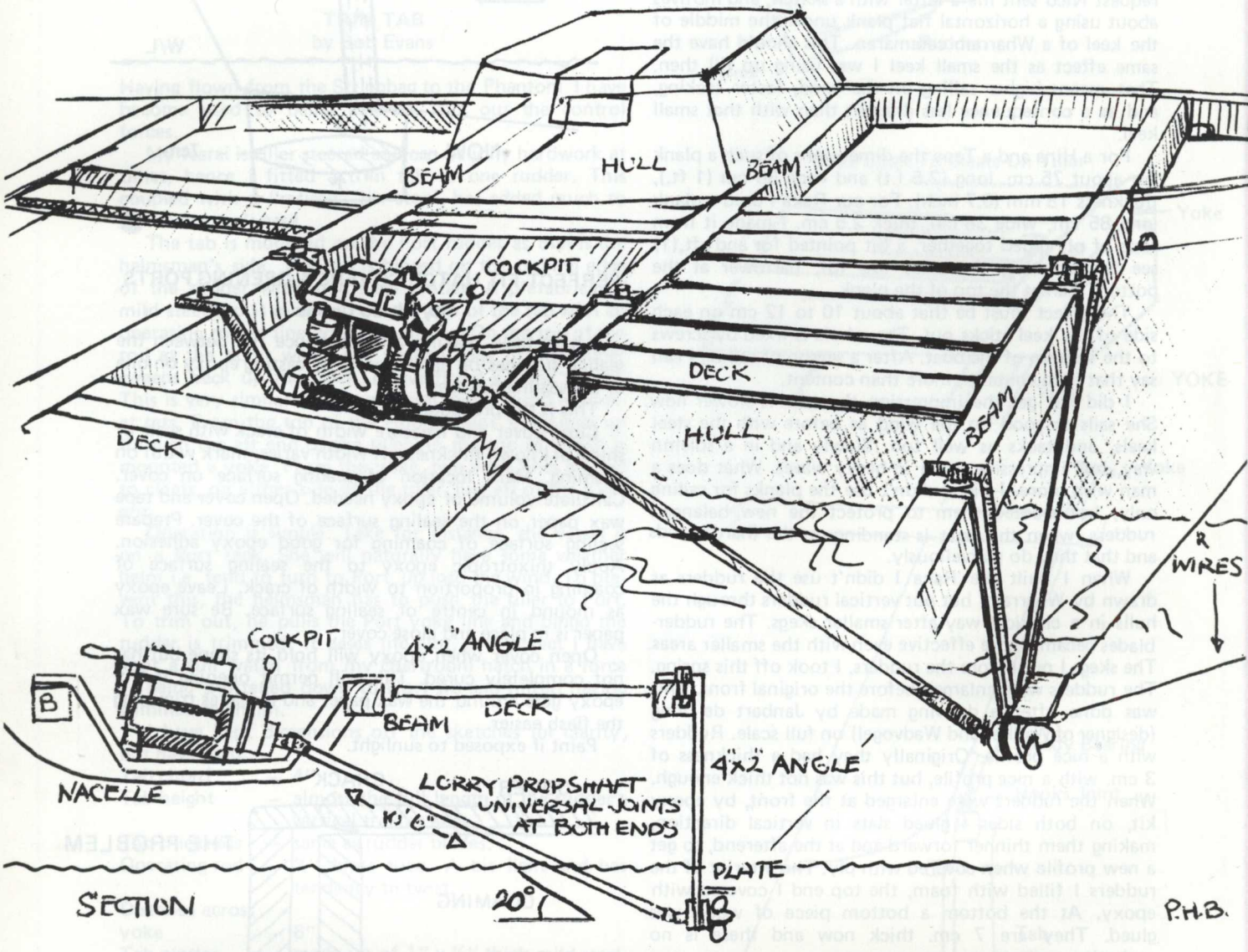
Close cover and measure width of crack with scale or shims of known thickness. If width varies, mark width on coaming. Mark location of sealing surface on cover. Calculate volume of epoxy needed. Open cover and tape wax paper on the sealing surface of the cover. Prepare sealing surface of coaming for good epoxy adhesion. Apply thixotropic epoxy to the sealing surface of coaming in proportion to width of crack. Leave epoxy as mound in centre of sealing surface. Be sure wax paper is in place and close cover.

Open cover when epoxy will hold its shape but has not completely cured. This will permit opening if any epoxy gets around the wax paper and it makes trimming the flash easier.

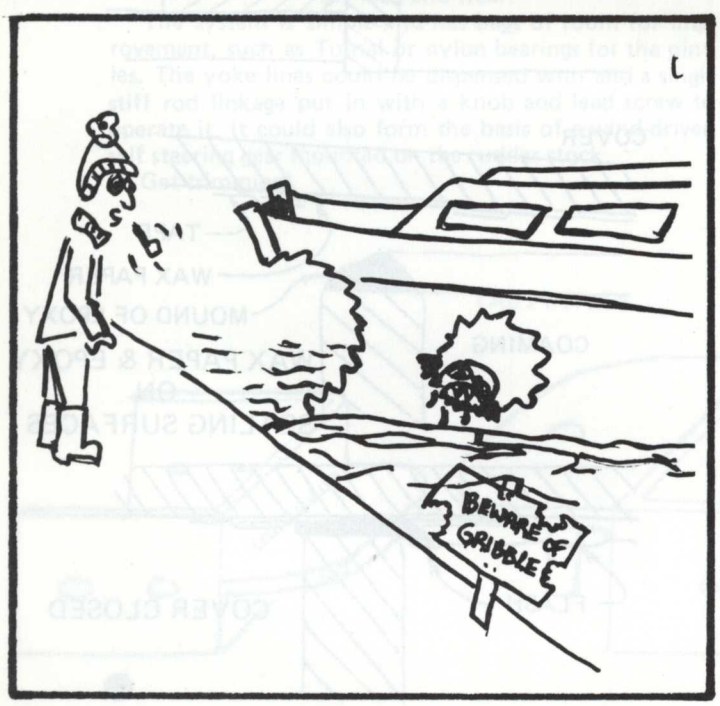
Paint if exposed to sunlight.



M.C. Moss' Engine Mounting



Some of us think this weighty engine and shaft, mounted this way, with the beams drilled could prove dangerous (Ed.)



CATALAC CAPSIZE – "LAZY DAISY"

I have just received the MOCRA Report on the capsize of the Catalac "Lazy Daisy" (see page 22 of the last issue. It appears that the owner had modified the hulls by adding low-aspect ratio keels 12–15" x 8ft and this is considered by MOCRA and by Tom Lack, the designer, to have been a contributary factor in the capsize. At the time I used the account in the last issue I was unaware of this item of information. (Ed.)

The following are the conclusions of the MOCRA investigation, reproduced by courtesy of the MOCRA Saftety Committee:–

1. Lazy Daisy was a sound, well-crewed but non-standard CATALAC on passage away from her customary sheltered cruising grounds.

2. The principle cause of capsize was broaching beam-on to a particularly unpleasent breaking crest. The broach was caused by taking the seas on the quarter while sailing fast rather than right astern at more moderate speed with much less sail set.

3. When the braking crest struck, the low aspect ratio keels would have tended to prevent the whole craft sliding sideways – instead, she rotated about the leeward keel, twisting off the leeward rudder blade in the process, until the underside of the bridge-deck was exposed to the full force of the rapidly moving crest. Total inversion then occurred very quickly indeed.

4. Survival without life-jackets, survival suits, flares or even lifelines under the hulls, depended on the resilience and good sense and determination of her very able crew who stayed in the relative shelter between the hulls until very close to the breakers.

5. Deep water and a good offing are much to be preferred, especially off headlands when the tidal stream is setting against a strong wind.

SURFCAT NOA-NOA

by Hedley Underwood

There is nothing like building your own boat, and even if it is the most diminutive of the Wharram range you can still permit yourself the full range of romantic illusions associated with fulfilling that particular dream. I suppose that's why I imagined Noa-Noa was a fitting name for a surfcat. I remember watching a TV programme about Gauguin which seemed to concentrate (alright, I seemed to concentrate) on the naked nubilia of the south sea islands, but incidentally said that man (Gauguín; remember him?!) called himself Noa-Noa – the savage. This name conjured up a vision of a more than usually suntanned version of myself and smashing through the seas, clutching the surfcat's mainsheet and after a year's building all this came true, all except the suntan that is.

The boat became an obsession soon after I'd ordered the plans. Living in London in a small rented flat I had absolutely nowhere to build it, which is a rather fundamental problem. For several months I tried agencies to rent garages without success, whilst building some of the smaller components in our kitchen – this did not make me very popular. Finally, as we drive regularly to Portsmouth to visit an elderly relative I decided to put their garage to good use. Apart from the feeling that I was building the boat over the telephone this proved quite successful, except that every fortnight or so we would drive down to Portsmouth and I would disappear for 48 hours among a blur of hammering, sawing and headscratching, to emerge occasionally to mix some more glue and scan the plans. The relationship between myself and Noa-Noa blossomed into an obsession, and that is how it had to be otherwise it would never have been built. (Other relationships tended to suffer during this period !!)

The building was very straight forward, apart from making the mistake of buying the plywood on a very windy day, but that's another story, involving an embarrassing roadside incident . . . I used marine grade 4 mm ply, although the plans suggest 5 mm which is virtually unobtainable now.

I also used clear fir for the ½ x ½ and ½ x ¾ as this wood takes quite a strain and is very thin, and also for the keels for durability: the plans recommend sitka spruce which is again very difficult to obtain. Using panel pins is an acquired art, I never really liked the panel pin pusher (say that after 5 pints) and so ended up with many a Tom and Jerry style throbbing thumb. The boat took a year to build but this was really about 20 weekends work, including chasing round timberyards, chandlers and sailmakers, and generally staring fondly at the emerging boat. (This kind of essential reverie took up a good deal of the time . . . .!)

The surfcat is a cheap boat to build if you shop around. There are two major layouts of cash, firstly for the plywood and secondly for the mast, sails and rigging. I bought a secondhand wooden mast from a Cadet which was split at the masthead sheave but easily repaired. There are many discarded wooden masts around as the 'keep up with the Jones technology brigade' buy metal masts. (I hope this race continues so we can look forward to accepting their gold anodised cast offs in future years!) My mast cost £15 including all the rigging, sheaves etc., and was brand new surplus stock from a sailmaker after a staggering quotation from Jeckells (£120!) total cost – £22 for two sails. Actually the mainsail had to be cut down to size. It's rather overgenerous proportions led me to speculate wildly over the possibilities of skittering across the surf at shatteringly fast speeds by a rather naive and simple formula lurking in the recesses of my mind. It ran something like this: more sail area = more speed. I actually put this to the test with alarming results. The day of launch was a tremendous moment although somewhat nerve racking, I miscalculated how long it would take to assemble (about ½ hour at first) and it was quite a windy day. We launched, sailed, tacked (oh Joy) nearly collided on many occasions and finally sailed into clear water. A good gust of wind transformed the tranquil scene and general air of self congratulation. I strained on the mainsheet and the lee hull buried itself with a sickening gurgle and a twisting motion. I cannot be sure if the weather hull lifted or not. This brought the boat to a rapid standstill and would have tipped her with a lighter crew, I think.

A hurried retreat to the scissors and the sewing machine transformed this tenderness and she has shown no signs of this again, even in a constant force seven.

This last summer we took the boat on top of the car camping and sailing around the south and west coast of England. The boat has sailed in a variety of different coastal and weather conditions and is still in pristine condition. The most memorable day was on the Gower peninsula with an offshore force 6–7 and a flat sea – four perfect sheets of spray and really exhilarating speed. She showed no sign of lifting a hull – I felt the mast would break first. This was one characteristic occasional observers liked about the boat, its incredible stability. On many occasions passers by were very complimentary about her looks (Wharrams are the only beautiful catamarans and even the surfcat has all the lines of the larger designs; – some people even asked if I had bought her brand new!)

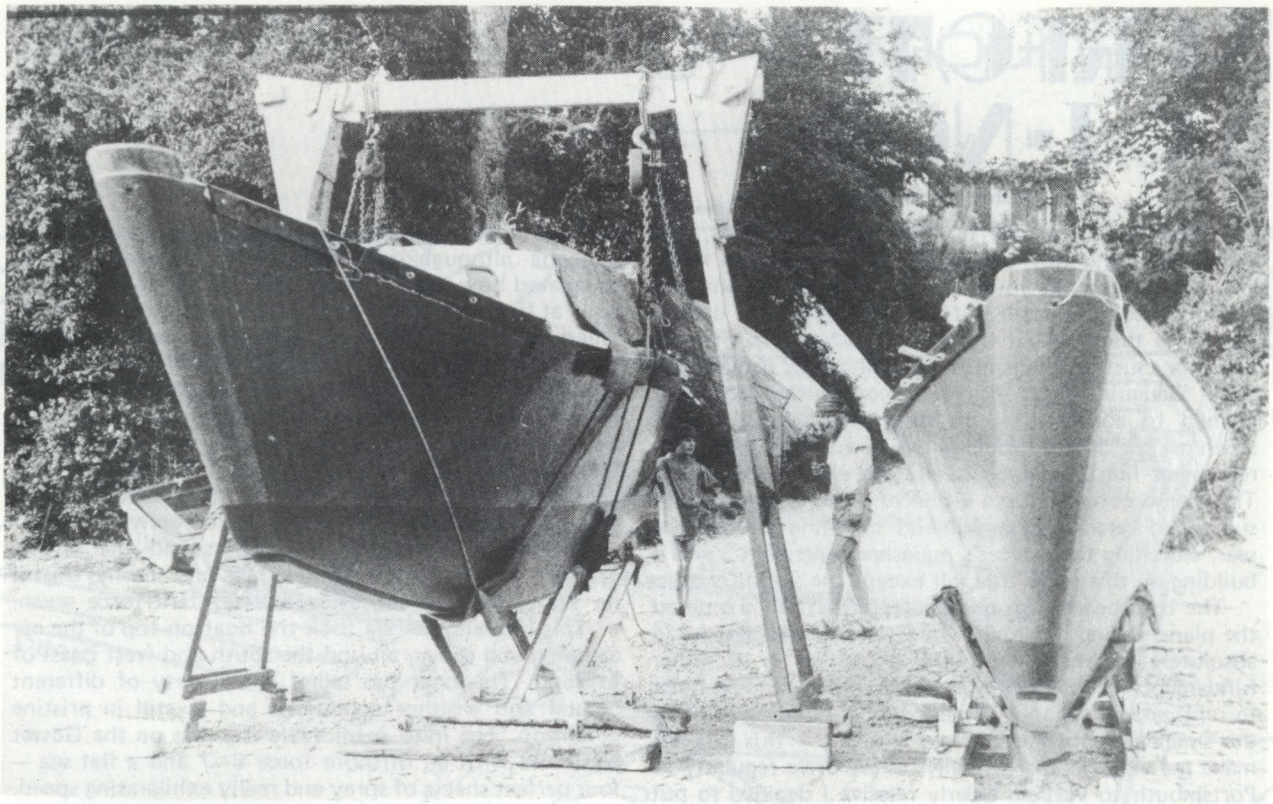
If I was building again I would add the following points to the plans:

1. Use cheap 4 ml. ply. Also, use yellow deal everywhere except the stringers (gunwales).
2. Use exterior grade ply for the bulkheads – the boat is not in the water long enough for problems to be encountered.
3. Make sure the decks are throughly seated after using Cuprinol on the inside. Preferably seal them with glass tape as this joint is under great pressure when sailing hard.
4. Deck slats on plans are not strong enough and need reinforcing underneath. A design for a trampoline and lowered centre beam would be better.
5. Use the thinnest grade panel pins. 1" pins are inclined to bend but you get used to them.
6. The 12 bolts holding the cross beams to the bulkheads take a long time to fit on the beach. A better idea would be clevis pins but they're more expensive.
7. Re-position the tiller connecting bar on the end of the tillers. Apart from being altogether better you can steer with your feet while sunbathing!

Sailing

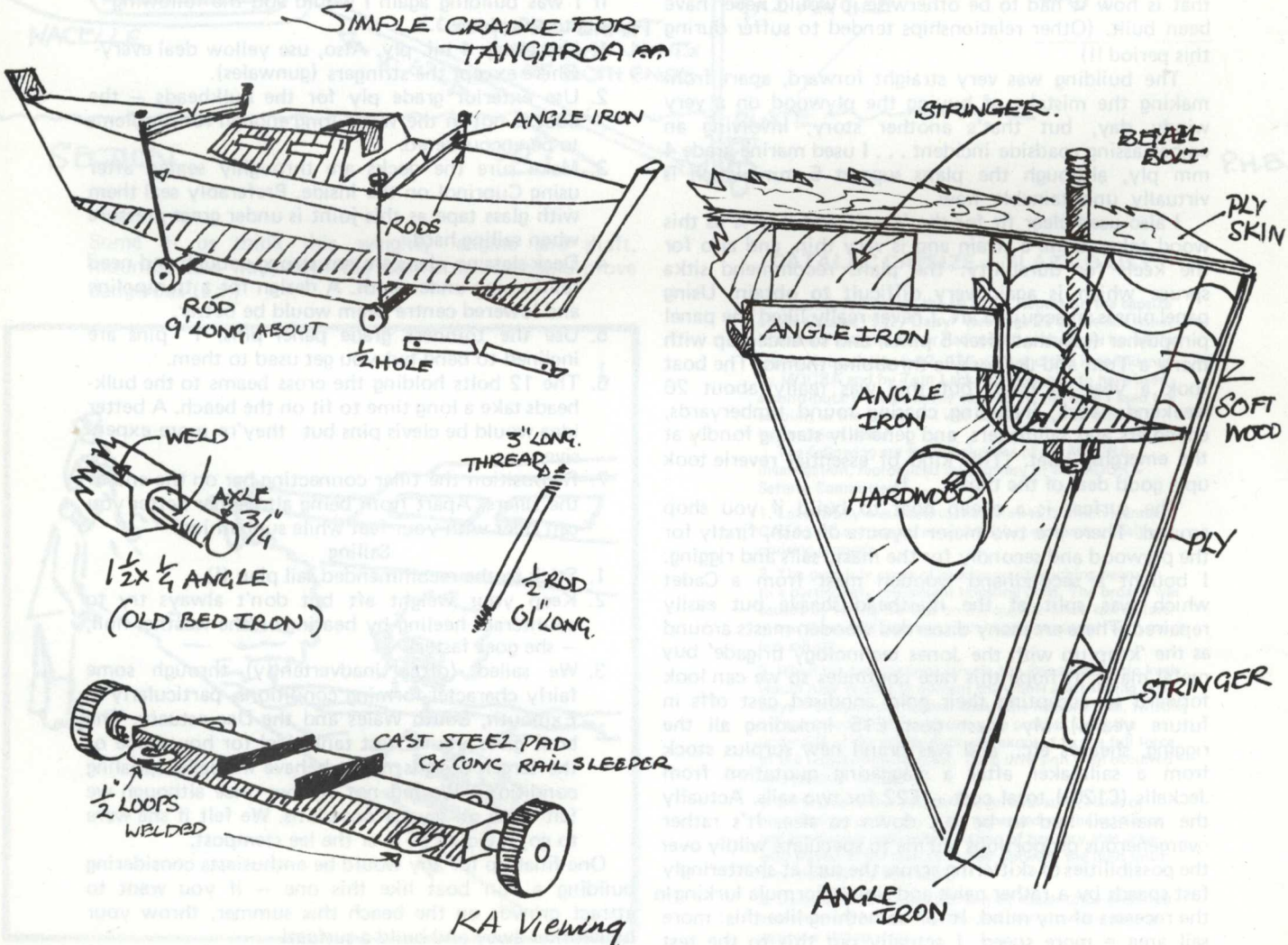
1. Stick to the recommended sail plan (!)
2. Keep your weight aft but don't always try to counteract heeling by bearing on the weather hull, – she goes faster!
3. We sailed (often inadvertently) through some fairly character-forming conditions, particularly in Exmouth, South Wales and the Dee estuary. The boat gives you a 'test tank' feel for how some of the larger designs might behave in really appaling conditions. We did not tip her once although we felt close on several occasions. We felt if she were to go, it would be over the lee stempost.

One final tip for any would be enthusiasts considering building a fun boat like this one – if you want to attract crowds on the beach this summer, throw your bullworker away and build a surfcat!



This illustration shows a modified Tane 28' being lifted clear of the ground to enable the trailer, that the hull was taken down to the launch site on to be removed & the hull to be dropped into the cradle awaiting under the hull. This gantry was dismantled and used to lift both hulls independently onto the road trailer. It is dismountable by four bolts at either end of the cross arm, it can be assembled in quick time and carried on the roof of my car. This system works best with two chain hoists, one does work, and enables one to do without expensive cranes etc.

(Pete Bousfield)



Cooks Corner

Tips: If you have an icebox, **freeze** everything possible before you leave. Freeze all your leftover stews etc. and bring them along when you have to leave in a hurry. This helps keep your ice a lot longer if you carry it. Keep the boat stocked with staples.

For a hearty breakfast when you are low on eggs try **Clints Pancake Recipe** (from his granny's cookbook).

Griddle Cakes – serves 4

Delicious if cooked with bacon on the griddle – Medium heat.

1½ cups white flour (or ½ brown)
3 teaspoons baking powder
½ teaspoon salt
2 tablespoons sugar (optional)
1/3 cup powdered milk
2 tablespoons oil
1 egg

Mix up a few batches of the dry ingredients and keep in a plastic container on the boat. When you want pancakes for breakfast add 1 cup water and beaten egg and mix thoroughly. Drop by spoonfuls on hot greased griddle, turn when puffed full of bubbles. Serve with syrup. This recipe makes small light pancakes, and if you don't have an egg it doesn't really matter. Wipe your griddle with a paper towel and stow, or if you have soured milk add ½ teaspoon baking soda instead of baking powder. This recipe will keep a long time in a sealed plastic container and tastes much better than a pancake mix. It has been a standby for years of camping and sailing.

Stocking a galley in a hurry; you never know when the weather will turn favorable for a short cruise.

Essential Equipment 4–5 plastic containers with good locking lids for canisters for tea, coffee, powdered milk, sugar etc. Army & Navy has good prices.

- sharp stainless steel knife
- teflon griddle for 2 burner stoves (which most of us have – perfect for breakfast.)
- small frying pan Tefals are good, light and don't stick.
- good stainless steel saucepan or small pressure cooker.
- large pot (cheap enamel is good) for boiling those crabs.
- flipper, silverware, tea & coffee pot, bottle opener & corkscrew, set of dishes I like plastic, they're light and good quality is as nice as china.

We carry a small Hibachi for barbecues – the folding type would be ideal.

HUNGARIAN BEEF AND NOODLES

(sounds exotic doesn't it?)

1 lb. ground beef
1 onion
½ cup canned beef broth
2 tsp. prepared mustard
1 tablesp. tomato paste
1 cup sour cream
Cooked noodles or rice

1. Brown meat, stir in onion; saute.
2. Stir in broth, mustard, tomato, Cover, simmer 5 minutes.
3. **Slowly** stir in sour cream, heat but do NOT boil.
4. Serve over hot cooked rice or noodles.

Stand clear, deck apes will eat anything in sight!

GALLEY GOURMET GOES TO "BATTER"

Left over beer? Of course its a dumb question, but what to do with flat beer. (If ever you should have wondered)
Use it in the galley, of course . . .

BEER BATTER FOR SEAFOOD

1 egg – separated
3 tablespoon oil
¾ cup flat beer
1 cup flour 1/8 tsp. salt.

(Start 2 hours ahead, then relax and drink some beer while you wait).

Combine egg yolk, oil, beer, flour and salt. Blend at high speed, scrape sides, blend again for one minute.

Pour in 2 quart mixing bowl, cover, rest for 2 hours. Just before frying; beat egg white till firm peaks, fold into batter. Use it on fish, shrimp, etc.

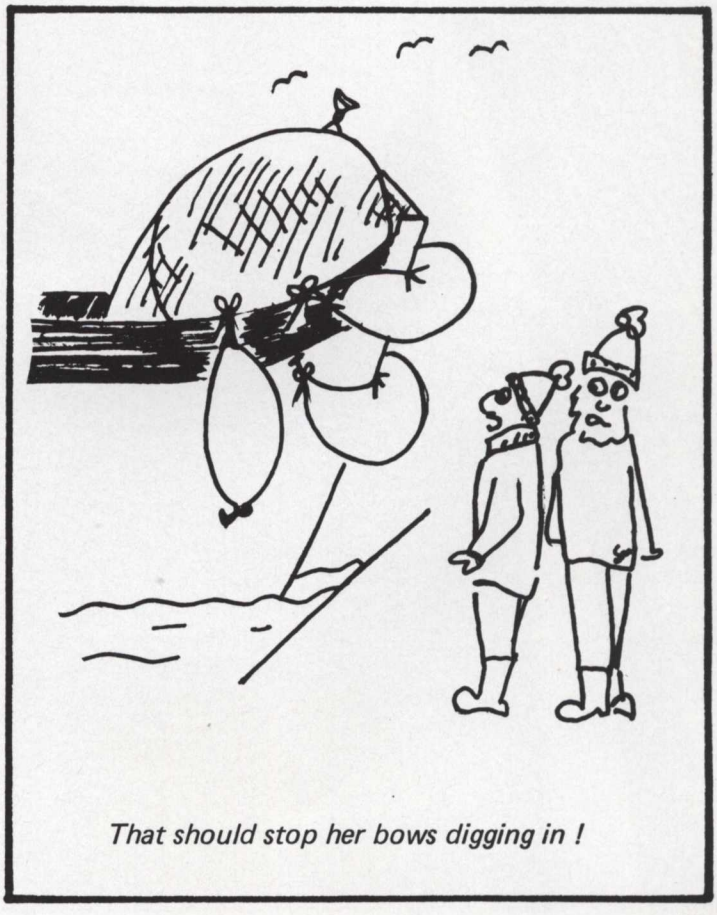
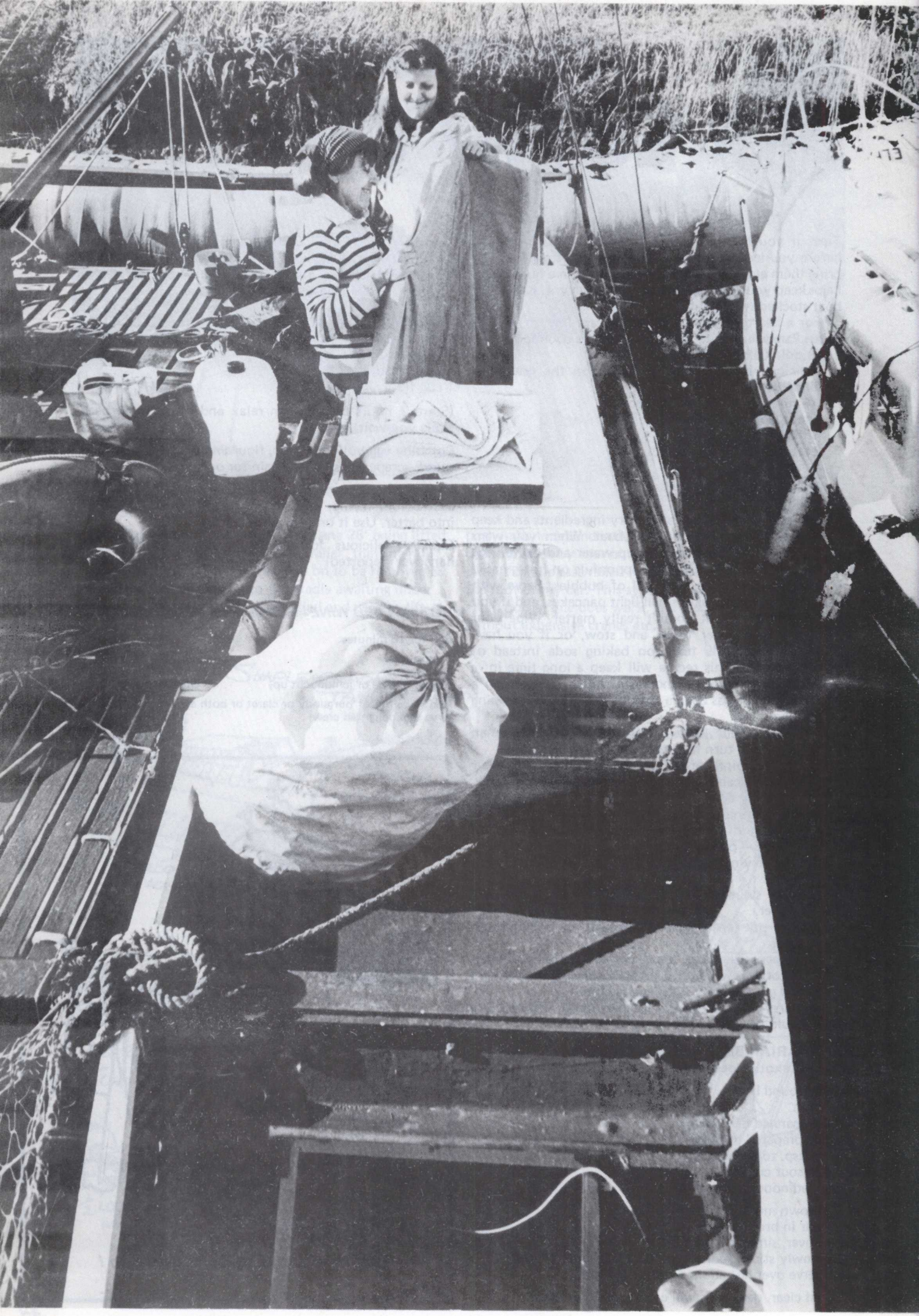
Equally delicious for drinkers and non-drinkers. No hangover reported!

HOT MULLED WINE–for when the breeze blows cold.

Boil for 15 minutes:

1 cup sugar
4 cups water
1 small orange or lemon, cut up;
10 raisins
18 whole cloves
5 cinnamon sticks

Add ½ gallon of burgundy or claret or both and keep hot as you serve to a delighted crew.



That should stop her bows digging in !